

PEDRO CASTRO MAINTENANCE CENTER PROJECT PW-6036

MAYOR
FREDERICK W. MUELLER, II

RACHEL GRAY
Henrietta "Hank" Huisking
CRAIG MOUNT

CITY COUNCIL MEMBERS



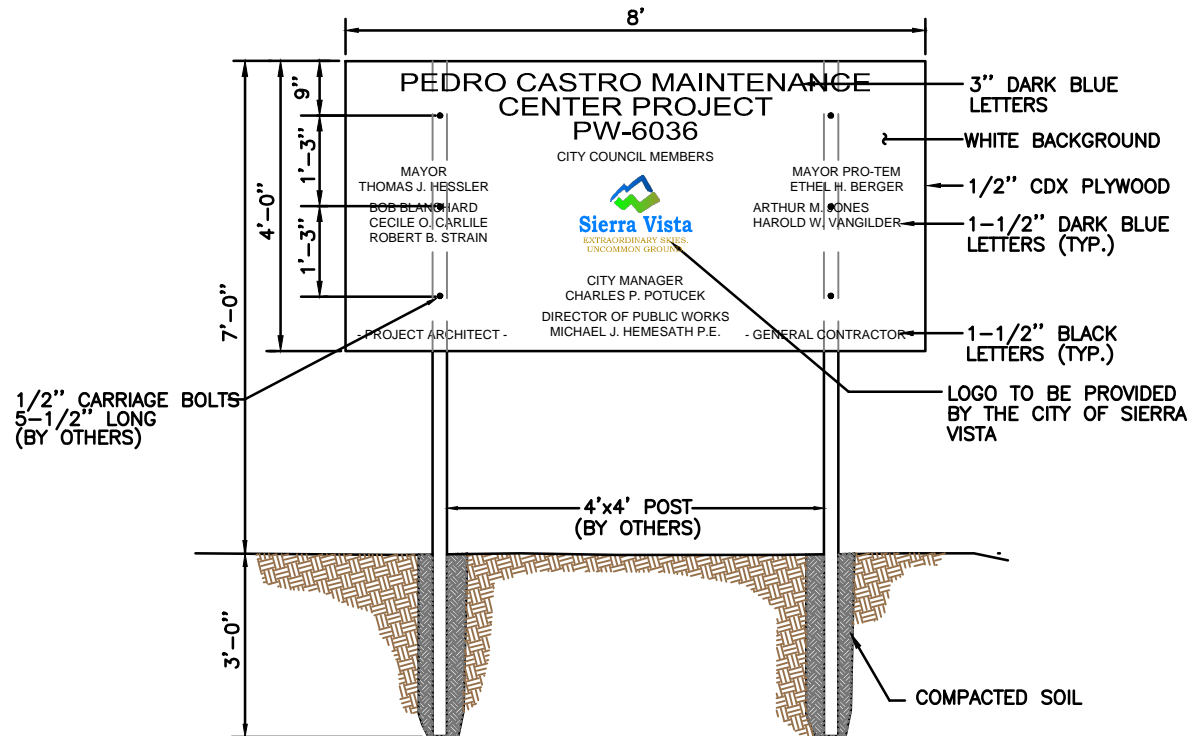
MAYOR PRO-TEM
ROBERT D. BLANCHARD

ALESIA ASH
GWEN CALHOUN

ABCD ARCHITECTS
AND ENGINEERS, INC.
- PROJECT ARCHITECT -

CITY MANAGER
CHARLES P. POTUCEK
DIRECTOR OF PUBLIC WORKS
SHARON G. FLISSAR P.E.

XYZ CONSTRUCTION, INC.
- GENERAL CONTRACTOR -



CITY OF SIERRA VISTA
1011 North Coronado Drive
Sierra Vista, AZ 85635
520-458-5775

CITY OF SIERRA VISTA
PROJECT SIGN DETAIL

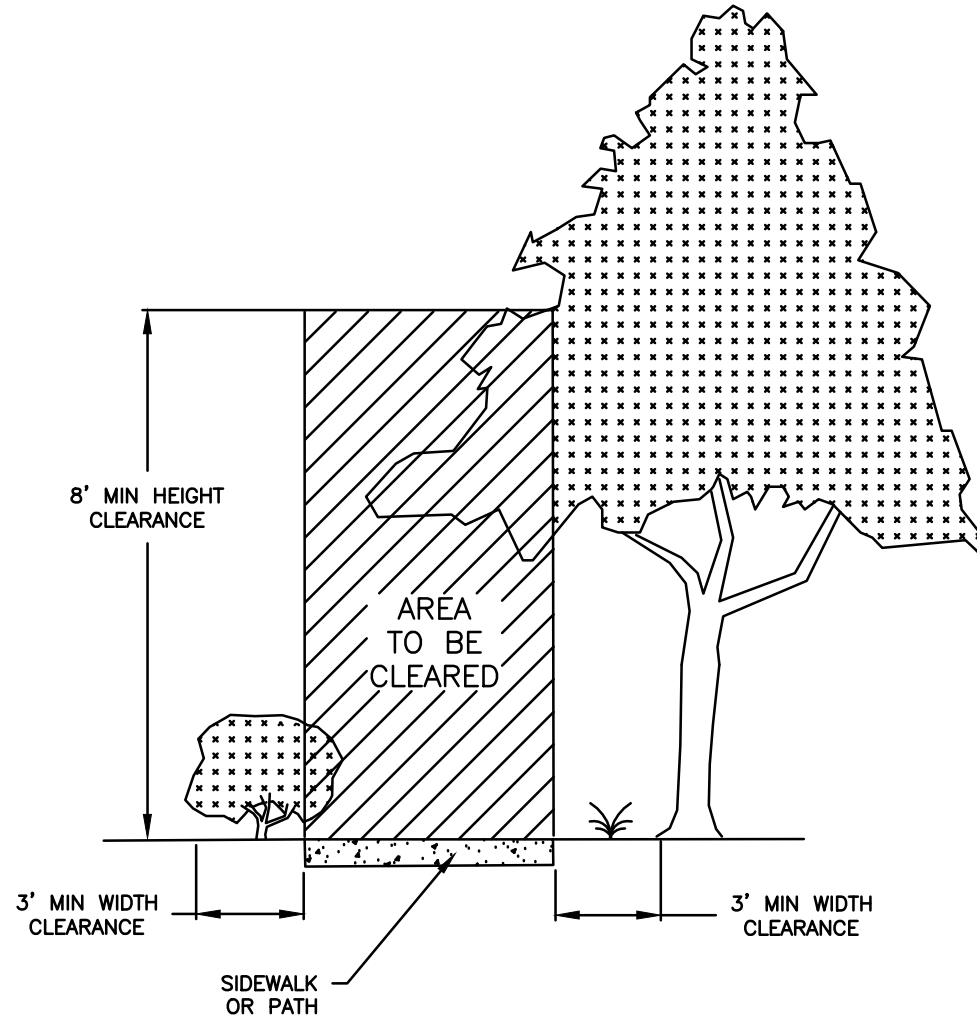
REVISED:
09/2015

SCALE:
NTS

DETAIL NO:
SV001

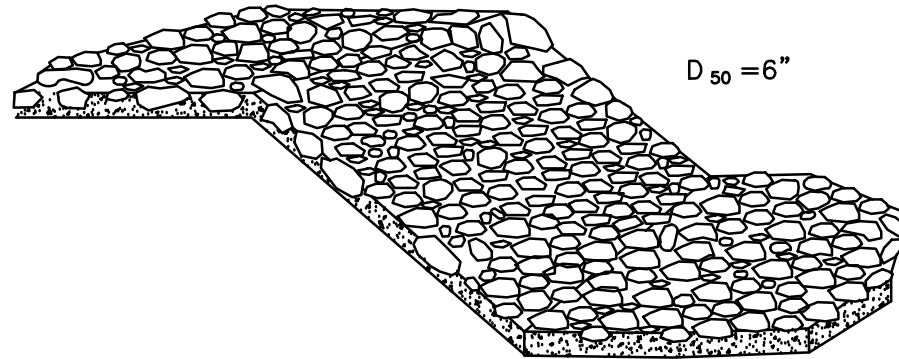
NOTE:

TREE/SHRUBS/PLANTS SHALL BE TRIMMED TO
NEAREST INTERSECTING BRANCH.



NOTES:

1. PREPARE THE BED FOR THE RIP RAP BY EXCAVATING AND SHAPING THE SLOPES AS WELL AS CONSTRUCTING THE TOE FOR RIP RAP INSTALLATION.
2. ALL STONES SHALL BE ANGULAR WITH ROUGH FLAT SURFACE TEXTURE. STONES SHALL BE APPROVED BY THE ENGINEER.
3. STONE SIZE (D_{50}) SHALL BE IN ACCORDANCE TO WHAT IS SHOWN ON THE PLANS.
4. THICKNESS OF ANY RIP RAP LAYER SHALL BE AT LEAST TWICE THE D_{50} SHOWN ON THE PLANS.
5. STONE TOLERANCE SHALL NOT EXCEED 1 INCH IN HEIGHT.
6. GAP TOLERANCE BETWEEN STONES SHALL NOT EXCEED 1 INCH.
7. LAY THE STONE PERPENDICULAR TO THE SLOPE.

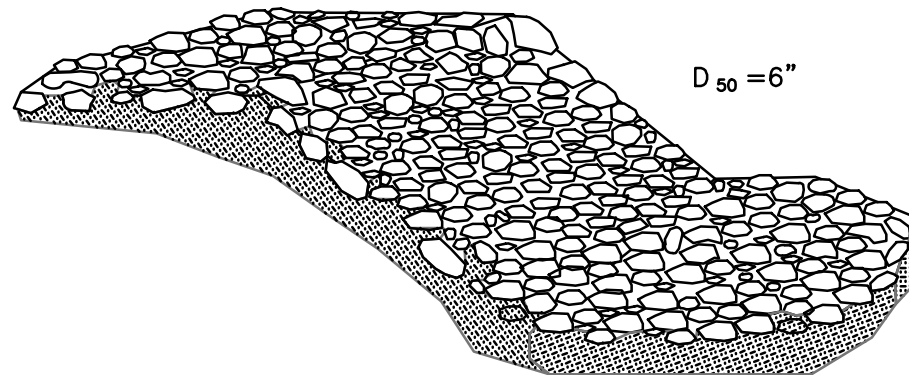


DESIGN GRADATION
FOR RIPRAP

% PASSING	Size (Inches)
100-90	12
85-70	9
50-30	6
15-5	4
5-0	2

NOTES:

1. PREPARE THE BED FOR THE RIP RAP BY EXCAVATING AND SHAPING THE SLOPES AS WELL AS CONSTRUCTING THE TOE FOR RIP RAP INSTALLATION.
2. ALL STONES SHALL BE ANGULAR WITH ROUGH FLAT SURFACE TEXTURE. STONES SHALL BE APPROVED BY THE ENGINEER.
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4. THICKNESS OF ANY RIP RAP LAYER SHALL BE AT LEAST TWICE THE D_{50} SHOWN ON THE PLANS.
5. STONE TOLERANCE SHALL NOT EXCEED 1 INCH IN HEIGHT.



DESIGN GRADATION
FOR RIPRAP

% PASSING	Size (Inches)
100-90	12
85-70	9
50-30	6
15-5	4
5-0	2



CITY OF SIERRA VISTA
1011 North Coronado Drive
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CITY OF SIERRA VISTA
DUMPED RIP RAP
EMBANKMENT PROTECTION/ARMOR

REVISED:
09/2015

SCALE:
NTS

DETAIL NO:
SV102

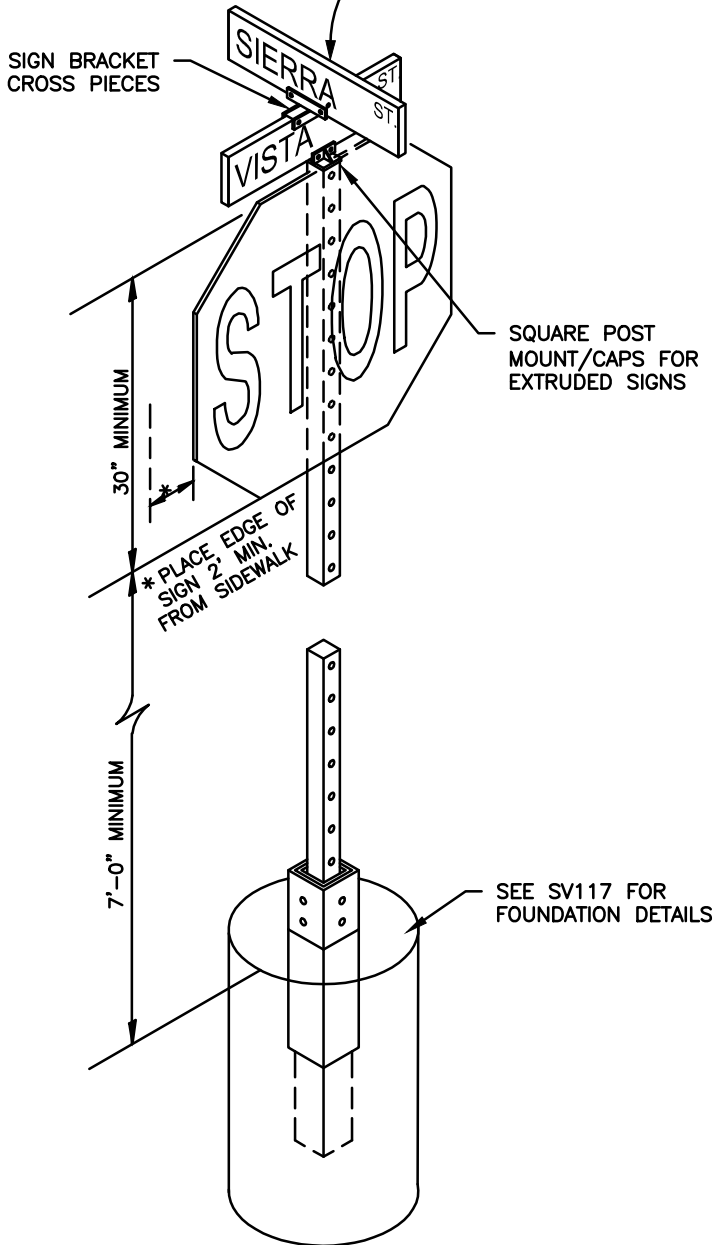
1. PERFORATED POSTS SHALL BE SQUARE TUBE FORMED FROM 0.105 U.S.S. GAUGE ASTM A-366 COLD ROLLED CARBON STEEL. THE SQUARE TUBES SHALL BE WELDED DIRECTLY IN THE CORNER BY HIGH FREQUENCY RESISTANCE WELDING OR EQUAL. THE POSTS SHALL BE EXTERNALLY SCARIFIED TO AGREE WITH STD. CORNER RADII OF 5/32" TO 1/64".
2. PERFORATED POSTS SHALL BE GALVANIZED TO CONFORM TO ASTM A-525. COATING DESIGNATION G-90.
3. ALL HARDWARE SHALL CONFORM TO ASTM A-307 CLASS A.
4. ALL HARDWARE SHALL BE GALVANIZED TO CONFORM TO ASTM A-153 OR CADMIUM PLATED TO CONFORM TO ASTM A-165.
5. ALL CONCRETE FOR SIGN FOUNDATION SHALL BE CLASS "A" CONC. PER MAG SECT. 725 & CURE FOR A MINIMUM OF 72 HOURS PRIOR TO SIGN INSTALLATION.
6. FOUNDATION WILL BE CONSTRUCTED WITH A 2" X 2" X 30" ANCHOR POST & 2-1/4" X 2-1/4" X 18" BASE POST WRAPPED AND SEALED WITH DUCT TAPE.
7. POST FOUNDATIONS SHALL BE PERPENDICULAR TO THE ROADWAY.
8. BOLT WITH NUT AND LOCK WASHER TO BE 7/16"x3" GALVANIZED & SHALL BE FASTENED NO HIGHER THAN 1-1/2" FROM THE TOP OF THE BASE AND ANCHOR POSTS.
9. BASE ASSEMBLY SHALL NOT EXCEED 4" ABOVE FINAL GRADE.
10. BOLT, FLAT WASHER, LOCK WASHER AND NUT ASSEMBLY SHALL BE PERPENDICULAR TO MAJOR OR CRITICAL TRAFFIC.



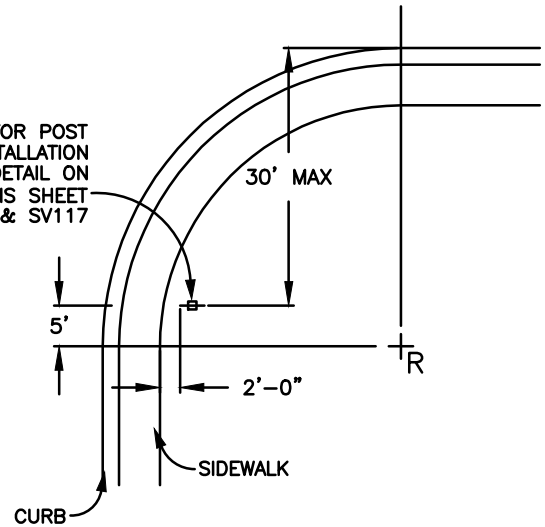
CITY OF SIERRA VISTA
SIGN POST DETAIL

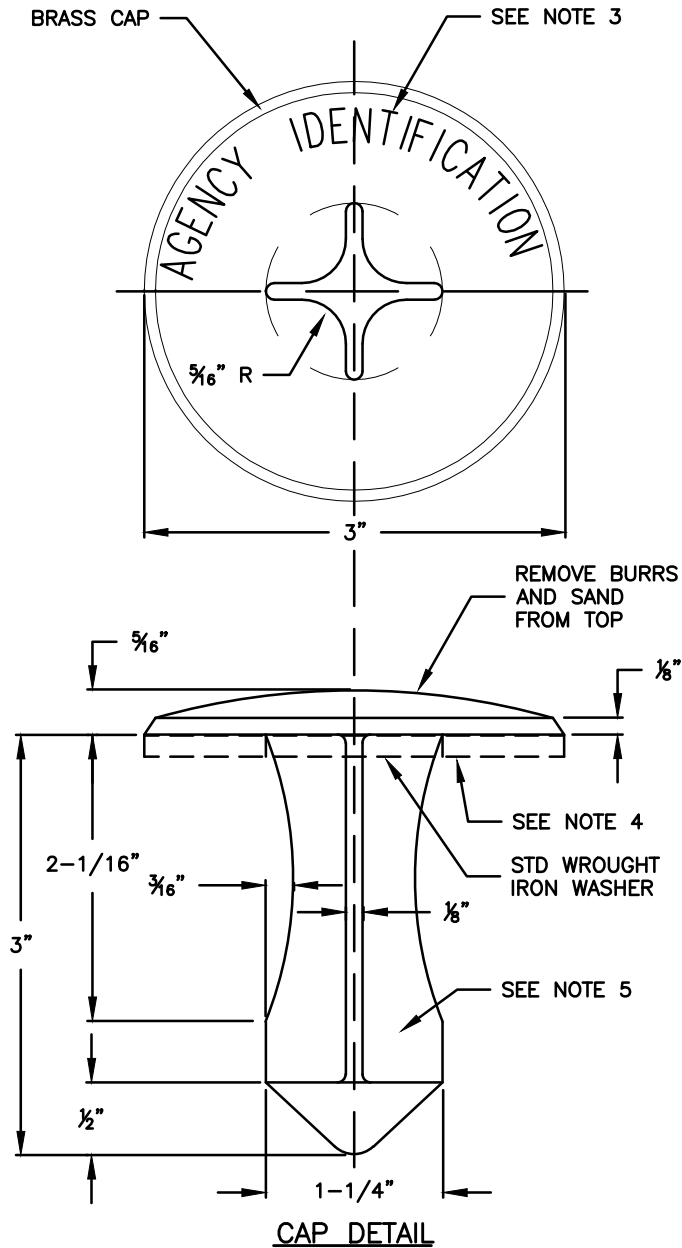
SV117

AT STREET INTERSECTIONS INSTALL
DOUBLE FACED EXTRUDED SIGNS FOR EACH STREET NAME.
VANDEL-PROOF HARDWARE FOR FASTENING AS
APPROVED BY THE CITY OF SIERRA VISTA
DEPARTMENT OF PUBLIC WORKS.



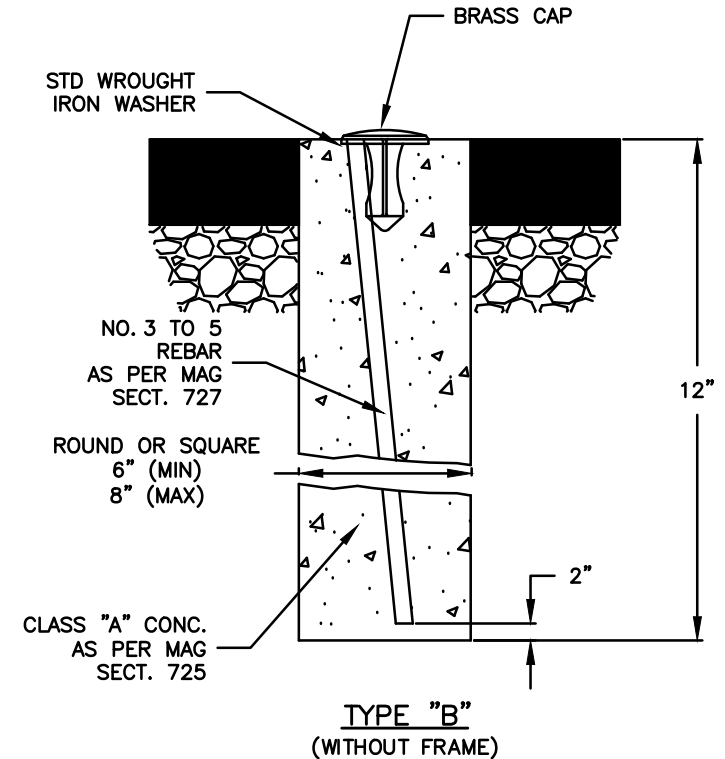
FOR POST
INSTALLATION
SEE DETAIL ON
THIS SHEET
& SV117





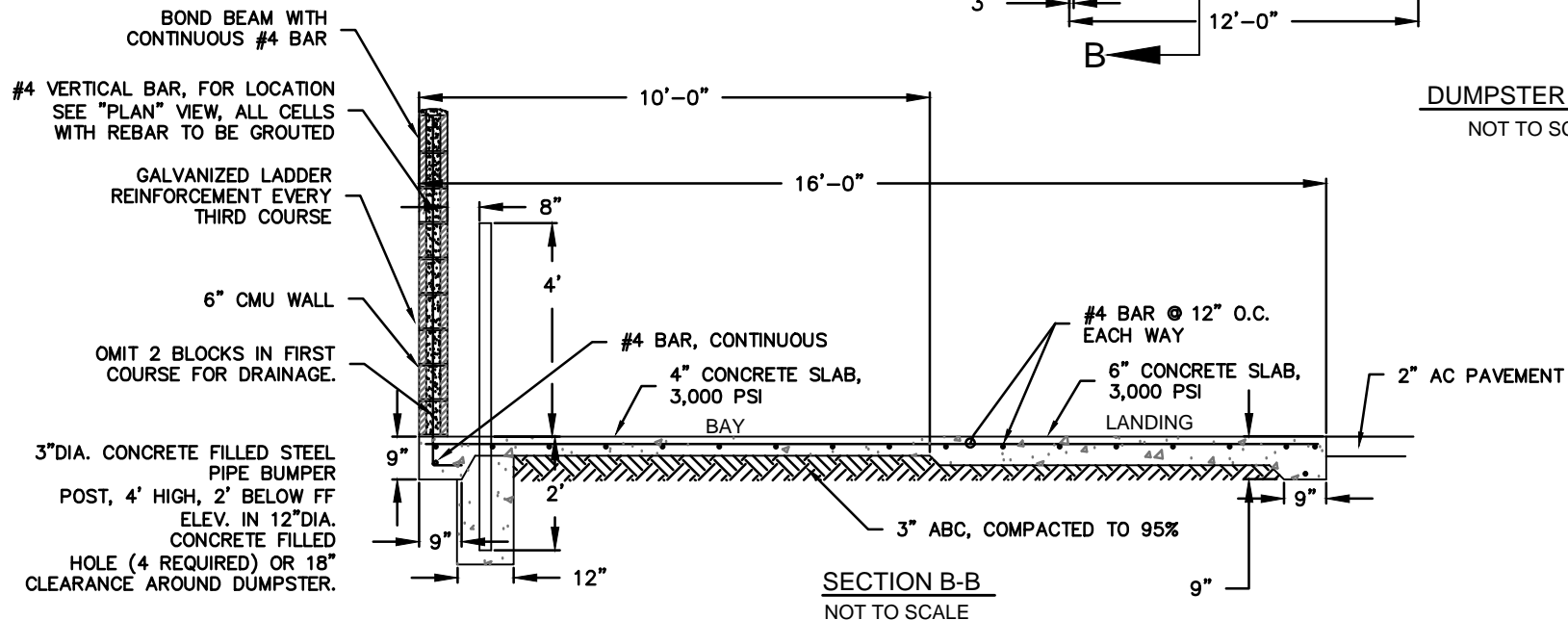
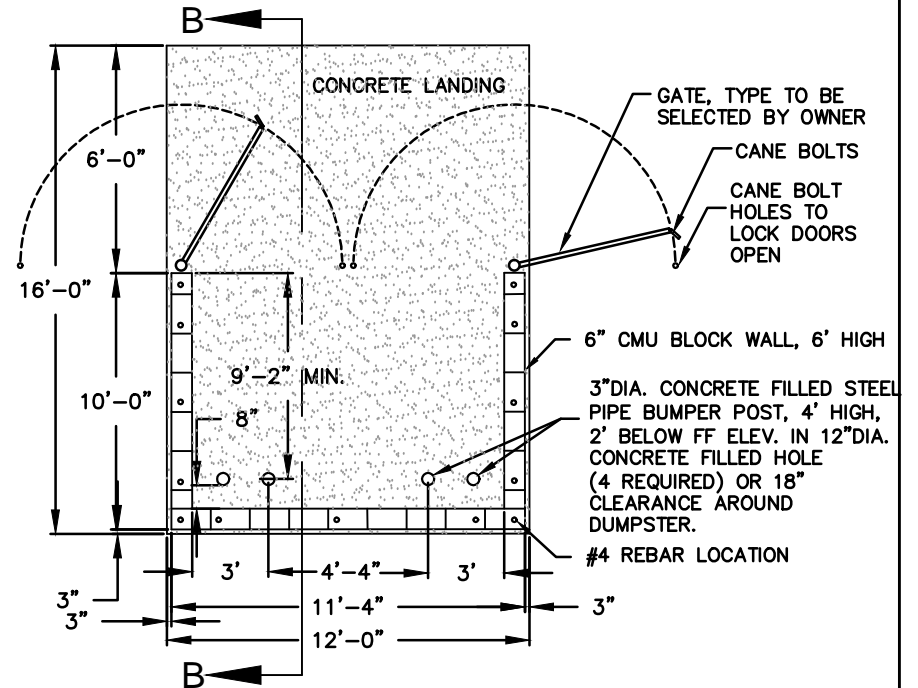
NOTES:

1. SURVEY MARKER WITH FRAME SHALL BE USED AT INTERSECTIONS OF MAJOR STREETS & COLLECTOR STREETS, AND AT OTHER SPECIAL POINTS AS SHOWN ON PLANS. SEE MAG STD. DETAIL 120, TYPE "A".
2. SUREVEY MARKER WITHOUT FRAME SHALL BE USED AT INTERSECTION OF LOCAL STREET CENTERLINES (EXCEPT WHERE TYPE "A" IS SPECIFIED), AT P.C.'s AND P.T.'s OF CURVES, AND AT OTHER POINTS AS SHOWN ON PLANS. SEE TYPE "B" BELOW.
3. LETTERS TO BE APPROX. $\frac{1}{32}$ " WIDE & $\frac{1}{32}$ " DEEP.
4. USE STANDARD WROUGHT IRON WASHER 3" O.D. X $\frac{1}{16}$ " THICK WITH 1- $\frac{3}{8}$ " HOLE.
5. CAP TO BE CONSTRUCTED OF RED BRASS OR BRONZE.



NOTES:

1. GATES HSALL HAVE 180° OPEN CLEARANCE WITH CANE BOLTS & CANE BOLT HOLES TO MAINTAIN OPEN POSITION.
2. ALL CONCRETE SHALL BE CLASS "A" CONC. PER MAG STD. SECT. 725.
3. ALL ABC SHALL BE PER STD. DETAIL SV200-3.



TRENCH REQUIREMENTS:

1. A WIDER TRENCH SHALL BE ALLOWED IF A PULLBOX IS USED AS MEANS FOR TRENCH SHORING.
2. FOR ALL EXCAVATION AND TRENCHES, THE CONTRACTOR SHALL ADHERE STRICTLY WITH OSHA CFR PART 1926 SUBPART P.
3. TRENCH EXCAVATIONS OVER 20- FEET IN DEPTH SHALL HAVE AN APPROVED SHORING PLAN, STAMPED BY A REGISTERED PROFESSIONAL ENGINEER TO BE SUBMITTED BY THE CONTRACTOR, FOR APPROVAL BY THE CITY OF SIERRA VISTA.

AGGREGATE BASE

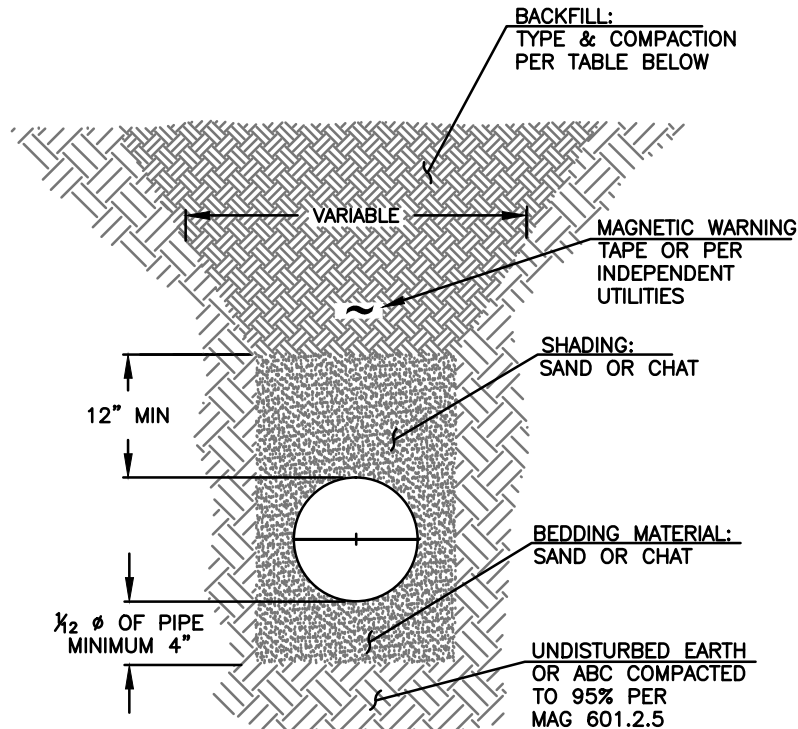
- AGGREGATE BASE PER STD. DETAIL SV200-4
- RECLAIMED CONCRETE MATERIAL (RCM) IN ACCORDANCE WITH MAG SPECIFICATION 701.4 MAY BE SUBSTITUTED FOR AGGREGATE BASE

NON SHRINK SLURRY

- ONE SACK TYPE II PORTLAND CONCRETE CEMENT PER CUBIC YARD.
- TYPE B SELECT AGGREGATE PER MAG 702, OR AGGREGATE BASE COURSE, OR RECLAIMED CONCRETE MATERIAL PER SV200-4.

ALLOWABLE BEDDING & SHADING SAND OR CHAT

- 100% PASSING 1/2" SIEVE.
- SUM OF PI PLUS 200 SIEVE SHALL BE LESS THAN 23.



ALLOWABLE TRENCH BACKFILL MATERIALS

NATIVE MATERIAL:

1. NATIVE MATERIAL SHALL BE USED WHERE FOUND SUITABLE BY A GEOTECHNICAL REPORT. A GEOTECHNICAL REPORT SHALL BE SUBMITTED TO THE CITY BY THE OWNER, FOR APPROVAL PRIOR TO CONSTRUCTION.
2. MATERIAL SPECIFICATIONS AND TESTING SHALL CONFORM TO SECTION 151.08.011 OF THE SIERRA VISTA DEVELOPMENT CODE
3. AT A MINIMUM, THE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - a. MATERIAL IS FREE OF BROKEN CONCRETE, BROKEN PAVEMENT, RUBBISH, CHUNKS OF CLAY, WOOD, ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL.
 - b. MATERIAL DOES NOT CONTAIN ROCK OR STONES LARGER THAN THREE INCHES.
 - c. FINES REQUIREMENT-MATERIAL SHALL NOT HAVE A PI GREATER THAN 15, AND THE TOTAL SUM OF THE PERCENT PASSING THE NO. 200 SIEVE AND THE PI SHALL NOT EXCEED 45.

* 200 SIEVE TO BE DETERMINED BY ASTM. D4318, DRY PREP, OR AASHTO T-90.

TRENCH WIDTH CHART 1		
SIZE OF PIPE (I.D.)	MAXIMUM WIDTH AT TOP OF PIPE GREATER THAN O.D. OF BARREL	MINIMUM WIDTH AT SPRINGLINE EA. SIDE OF PIPE
LESS THAN 18"	20"	8"
18" TO 24"	23"	9.5"
27" TO 39"	28"	12"
42" TO 60"	34"	14"
OVER 60"	PER MAG. TABLE 601-1, FLEX PIPES	

BACKFILL REQUIREMENTS						
	TRENCHING IN RIGHT OF WAY OUTSIDE ROADWAY PRISM OR IN UNPAVED ALLEY		TRENCHING IN EXISTING ROADWAY PRISM		TRENCHING IN PROPOSED ROADWAY PRISM	
	ALLOWABLE BACKFILL MATERIALS	COMPACTION REQUIREMENT	ALLOWABLE BACKFILL MATERIALS	COMPACTION REQUIREMENT	ALLOWABLE BACKFILL MATERIALS	COMPACTION REQUIREMENT
NATIVE MATERIAL WITHOUT FINES REQUIREMENT	X	95%				
NATIVE MATERIAL WITH FINES REQUIREMENT	X	95%			X	95%
AGGREGATE BASE	X	95%	X	*1 & *2	X	95%
NON SHRINK SLURRY	X	NA	X	NA	X	NA
*NOTES: 1. 95% EXCEPT FOR THE TOP 2' SHALL BE 100%. 2. PAVEMENT REPLACEMENT TO BE T-TOP PER MAG. STD. DETAIL 200						



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520-458-5775

CITY OF SIERRA VISTA
STORM DRAIN/SEWER/UTILITY
BACKFILL AND BEDDING DETAIL

REVISED: 09/2015
SCALE: NTS

DETAIL NO:
SV200-3

AGGREGATE BASE COURSE

702.2.1 REPLACE TABLE 702-1 OF THE MAG STANDARD CONSTRUCTION SPECIFICATIONS WITH THE FOLLOWING:

REVISED TABLE 702-1			
Sieve Analysis Test Methods AASHTO T-27, T-11			
Sieve Size	Accumulative Percentage Passing Sieve, by Weight		
	Select Material		Aggregate Base Course
	Type A	Type B	
3 IN.	100	—	—
1-1/2 IN.	—	100	100
1 IN.	—	—	90-100
NO. 4	30-75	30-70	32-65
NO. 8	20-60	20-60	20-60
NO. 30	10-40	10-40	10-40
NO. 200	0-12	0-12	3-12
Plasticity Index Test Methods AASHTO T-89 Method A, T-90, T146 Method A			
MAXIMUM ALLOWABLE VALUE	5	5	5
Fractured Face, One Face Test Method ARIZ 212, Percent by Weight of the Material Retained on a #4 Sieve			
MINIMUM REQUIRED VALUE	50	50	50
Resistance to Degradation and Abrasion by the Los Angeles Abrasion Machine Test Method AASHTO T-96, Percent Loss by Weight			
MAXIMUM ALLOWABLE VALUE AT 100 REVOLUTIONS	10	10	10
MAXIMUM ALLOWABLE VALUE AT 500 REVOLUTIONS	45	45	45



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CITY OF SIERRA VISTA
STORM DRAIN/SEWER/UTILITY
BACKFILL AND BEDDING DETAIL

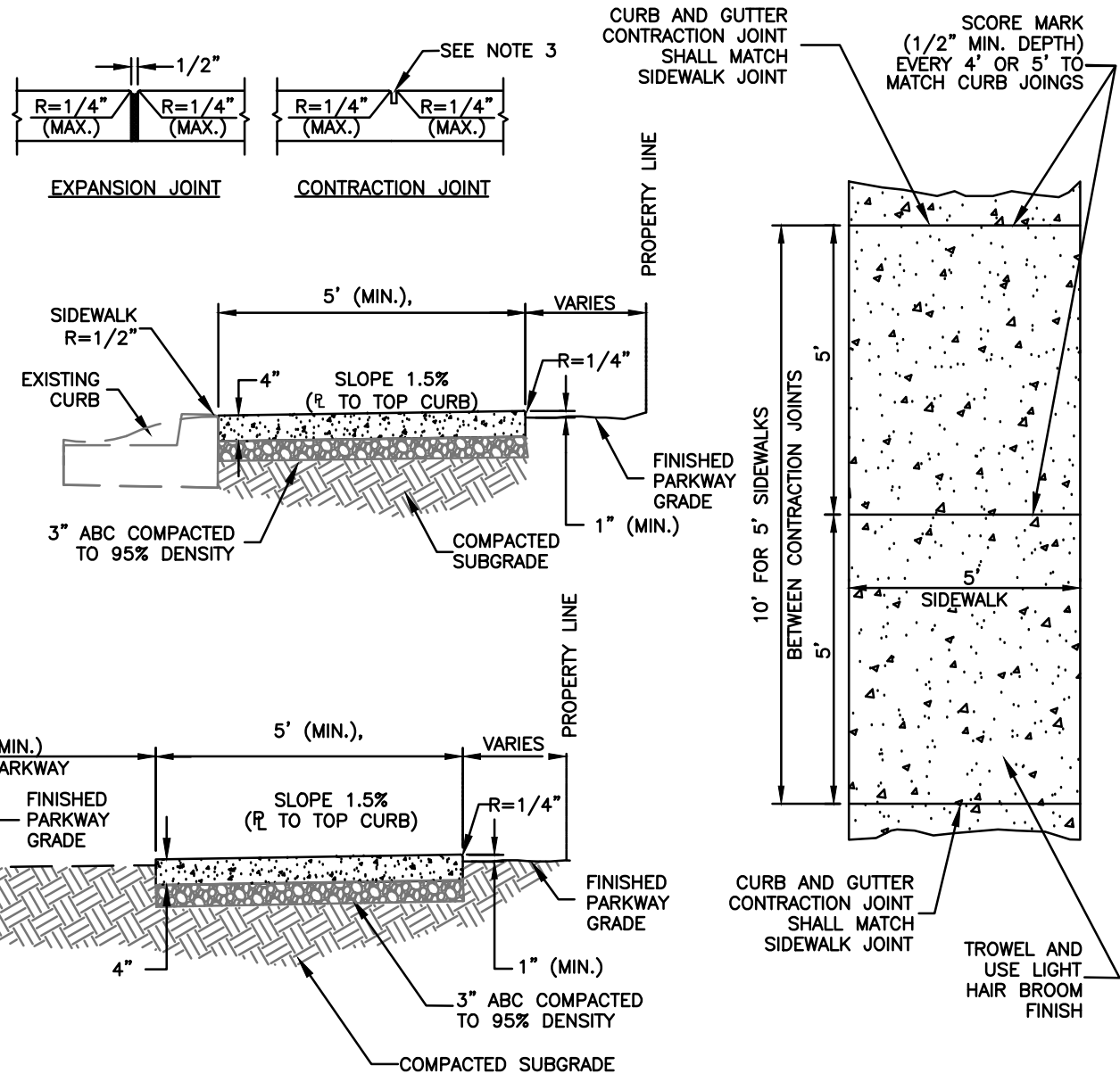
REVISED:
09/2015

SCALE:
NTS

DETAIL NO:
SV200-4

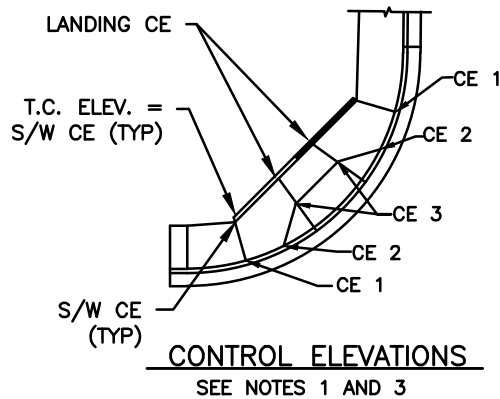
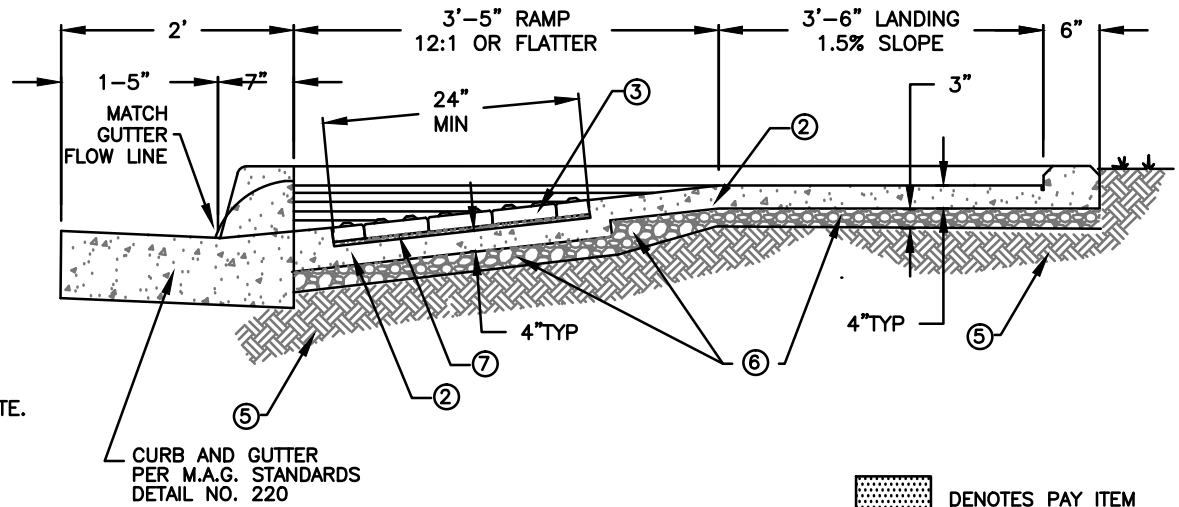
NOTES:

1. SIDEWALK CONSTRUCTION SHALL CONFORM TO MAG SECT. 340.
2. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, PER MAG STD. SPEC. 729.
3. LARGE AGGREGATE, IN CONTRACTION JOINT, SHALL BE SEPARATED TO A DEPTH OF 1", FINISH DEPTH SHALL BE A MINIMUM OF 3/4".
4. EXPANSION JOINT 50' MAXIMUM SPACING PER MAG SECT. 340.
5. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725.
6. SEE STD. DETAIL SV200-4 FOR ABC GRADATION. COMPACTION TO 95%.
7. SUBGRADE PREPARATION PER MAG STD. SECT. 301.
8. 3" ABC COMPACTED TO 95% DENSITY. SEE STD. DETAIL SV200-3.

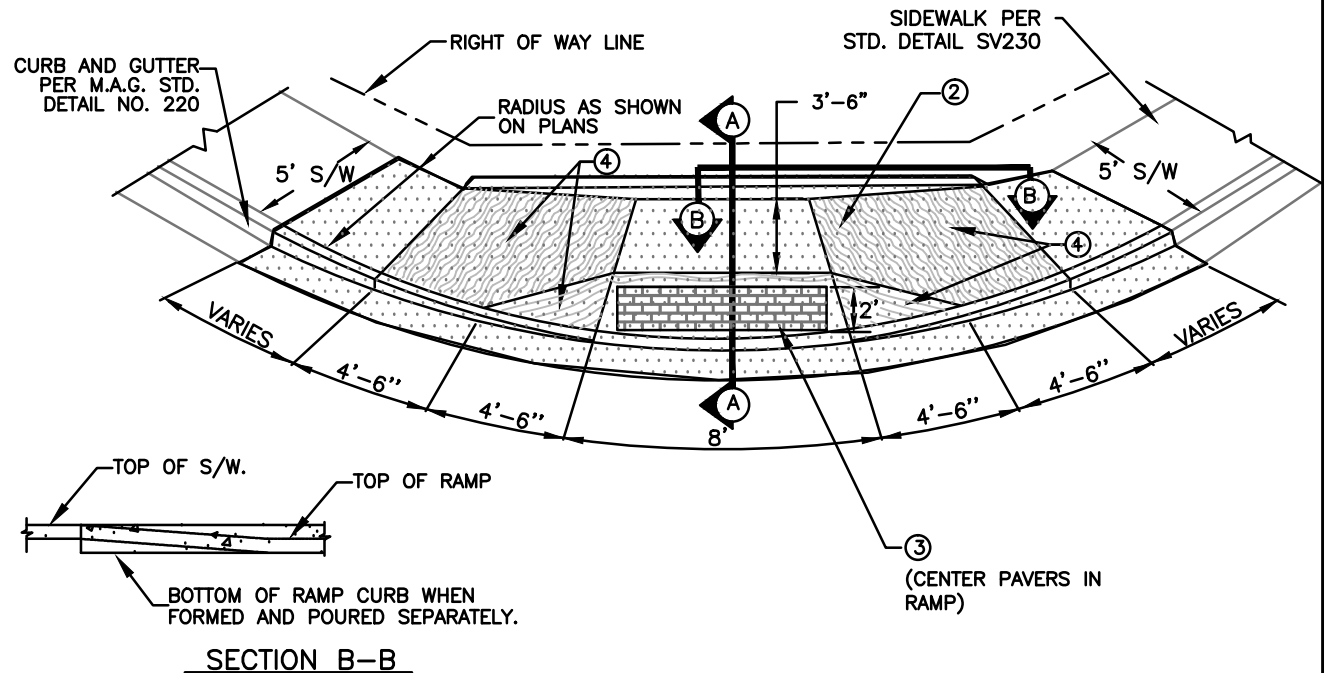


NOTES:

1. CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADIALLY. GUTTER ELEV.=0.
2. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725.
3. ALL HANDICAP RAMPS SHALL HAVE ADA DETECTABLE TRUNCATED WARNING PAVERS PER DETAIL SV263.
4. ROUGH BROOM FINISH (TYP)
5. SUBGRADE PREPARATION PER MAG STD. SECT. 301.
6. 3" ABC COMPACTED TO 95% DENSITY. SEE STD. DETAIL SV200-3.
7. 1" OF BEDDING SAND BETWEEN NEW PAVERS AND CONCRETE.
8. USE CONTROL ELEVATIONS ASSOCIATED WITH CURB HEIGHT AT SIDEWALKS.



CONTROL ELEV.	4" Rolled Curb	6" Vertical Curb
CE1	4"	6"
CE2	2"	3"
CE3	2"	3"
S/W CE	2-7/8"	6-7/8"
LANDING CE	2-1/2"	3-1/2"



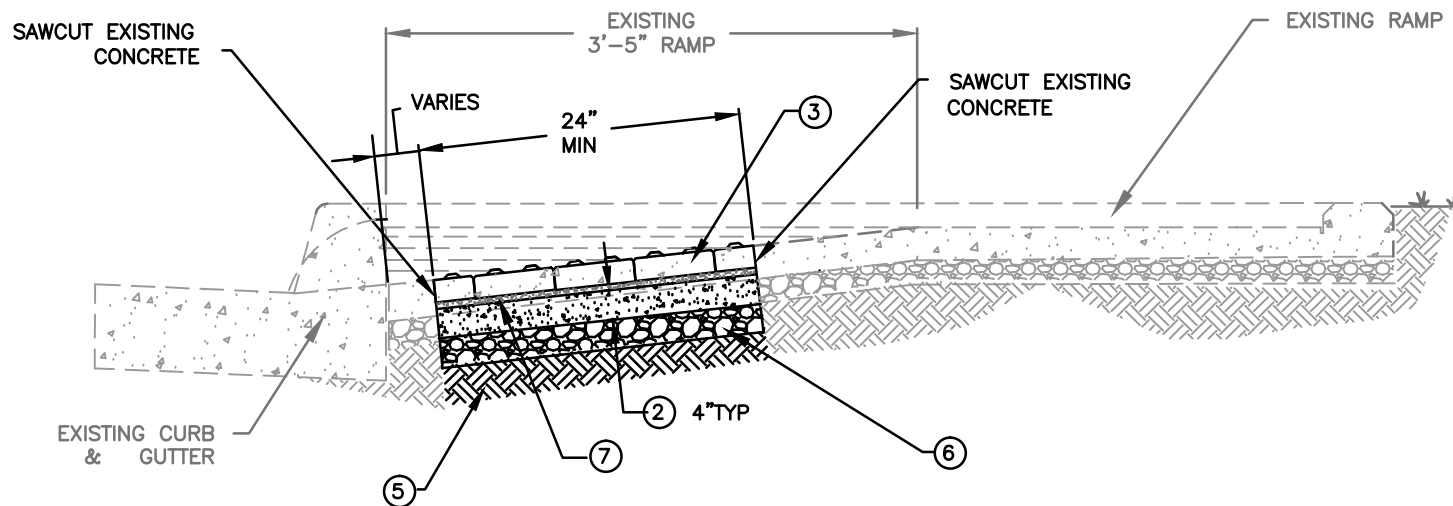
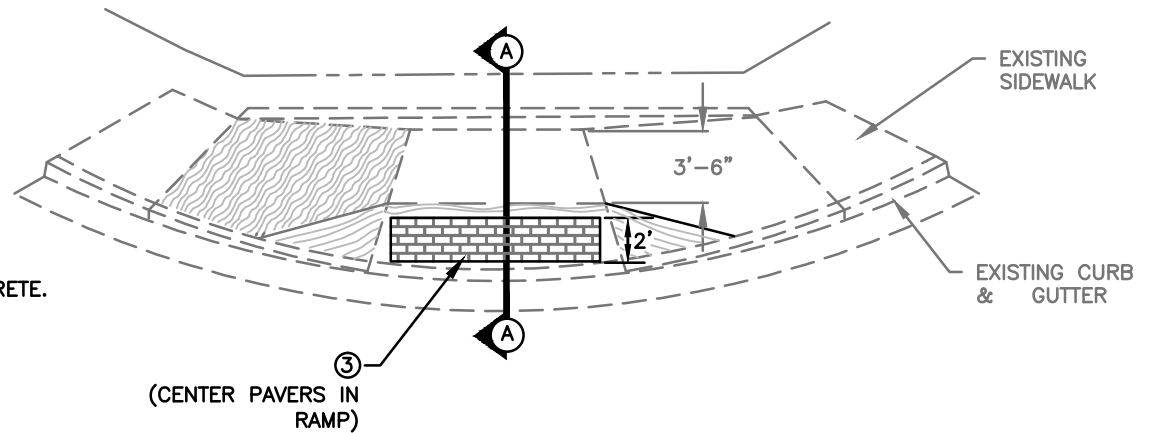
CITY OF SIERRA VISTA
1011 North Coronado Drive
Sierra Vista, AZ 85635
520-458-5775

CITY OF SIERRA VISTA
ADA RAMPS WITH ADA
TRUNCATED PAVERS

REVISED: 09/2015
SCALE: NTS
DETAIL NO: SV235-1

NOTES:

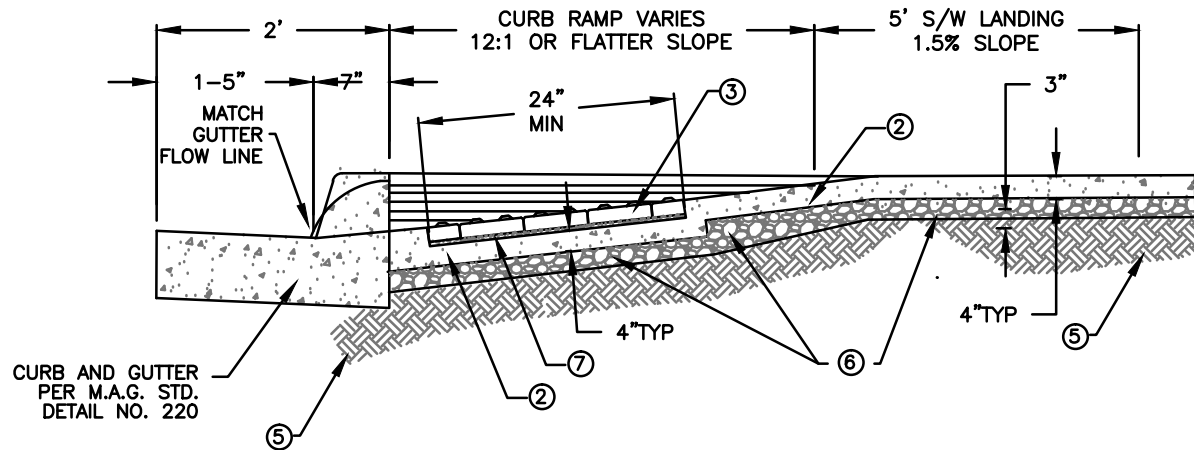
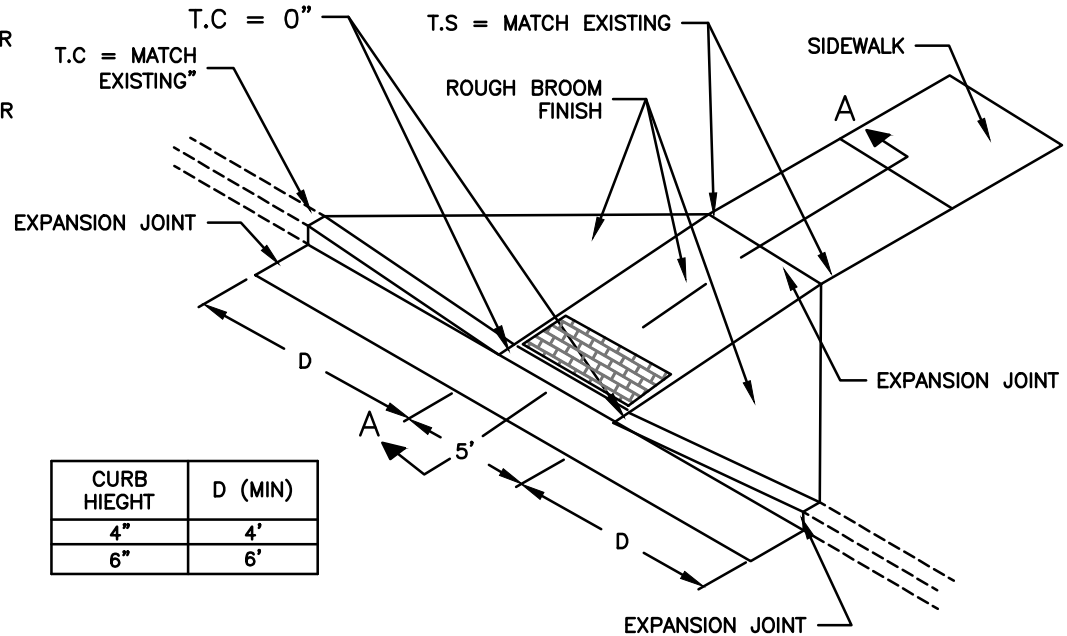
1. CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADially. GUTTER ELEV.=0.
2. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725.
3. ALL HANDICAP RAMPS SHALL HAVE ADA DETECTABLE TRUNCATED WARNING PAVERS PER DETAIL SV263.
4. ROUGH BROOM FINISH (TYP)
5. SUBGRADE PREPARATION PER MAG STD. SECT. 301.
6. 3" ABC COMPACTED TO 95% DENSITY. SEE STD. DETAIL SV200-3.
7. 1" OF BEDDING SAND BETWEEN NEW PAVERS AND CONCRETE.



SECTION A-A

NOTES:

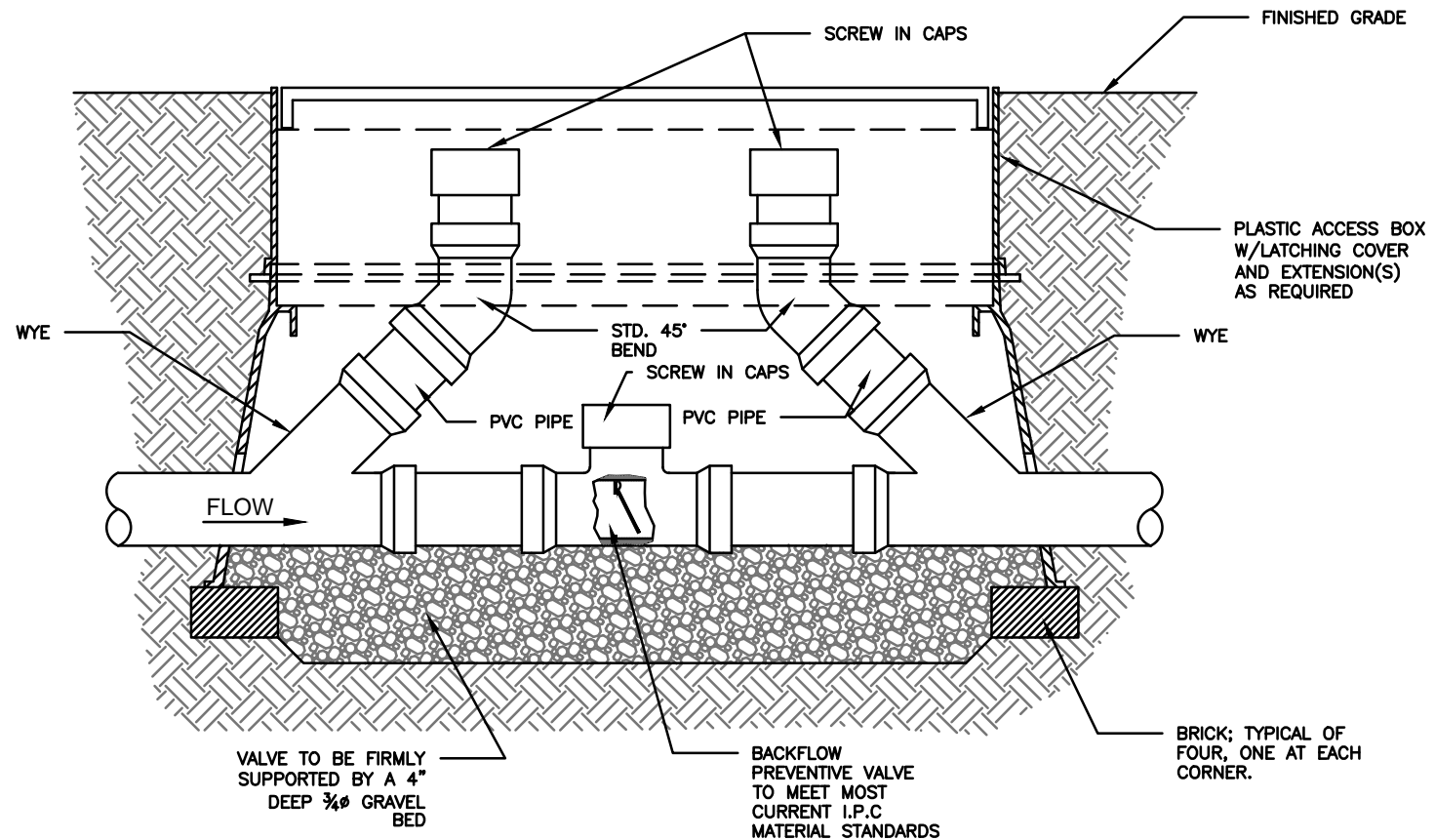
1. CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADIALY. GUTTER ELEV.=0.
2. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725.
3. ALL HANDICAP RAMPS SHALL HAVE ADA DETECTABLE TRUNCATED WARNING PAVERS PER DETAIL SV263.
4. ROUGH BROOM FINISH (TYP)
5. SUBGRADE PREPARATION PER MAG STD. SECT. 301.
6. 3" ABC COMPACTED TO 95% DENSITY. SEE STD. DETAIL SV200-3.
7. 1" OF BEDDING SAND BETWEEN NEW PAVERS AND CONCRETE.
8. USE CONTROL ELEVATIONS ASSOCIATED WITH CURB HEIGHT AT SIDEWALKS.



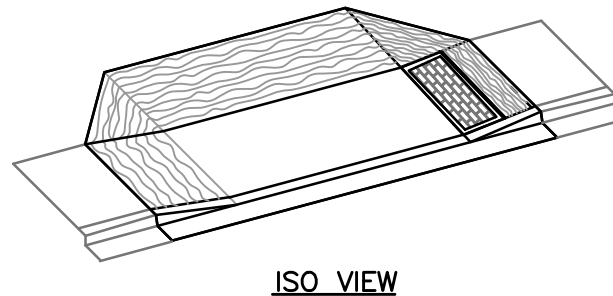
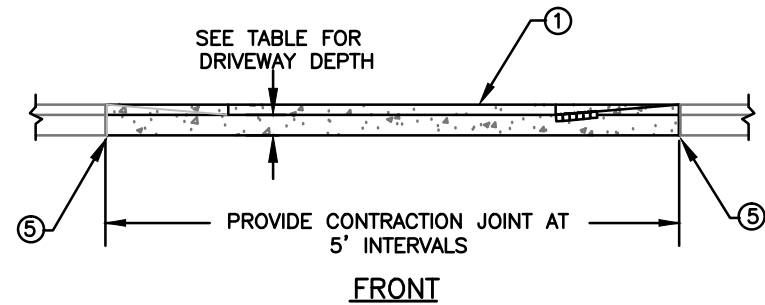
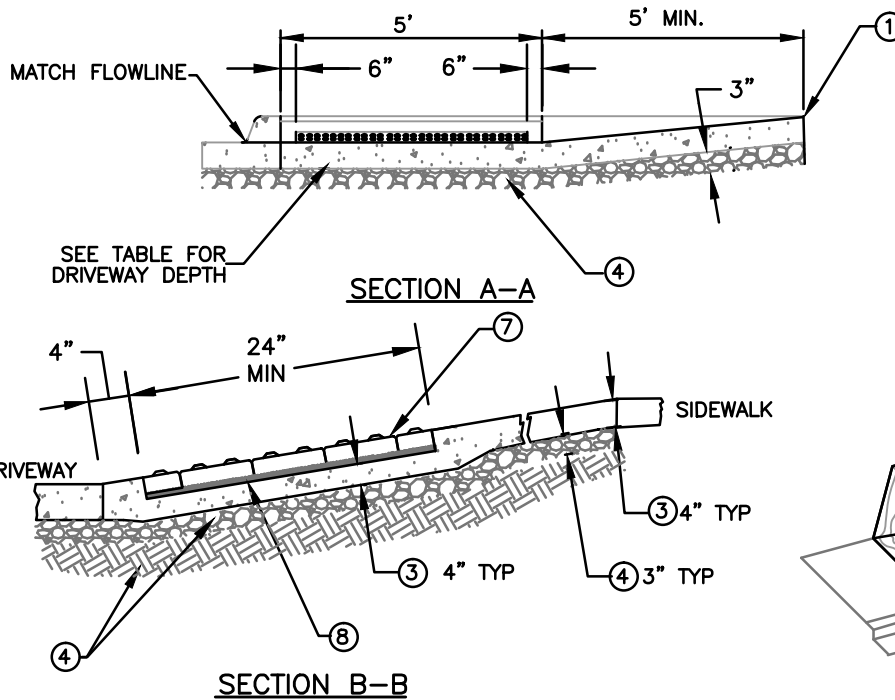
SECTION A-A

NOTES:

1. ALL PIPE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D-3034, SDR-35 PER MAG SPECIFICATIONS 745.
2. SIZE OF PIPE SHALL BE 4" UNLESS OTHERWISE SHOWN ON PLANS.
3. ALL WORK SHALL CONFORM TO THE CITY OF SIERRA VISTA DEPARTMENT CODE SECTION 151.08.007.E.4.
4. BACKFLOW ASSEMBLIES SHALL BE INSTALLED ON ALL HCS's
5. USE TEFLON TAPE ON ALL THREADED CONNECTIONS.



1. HEIGHT OF BACK OF ENTRANCE SHALL BE EQUAL TO OR GREATER THAN THE HEIGHT OF THE BACK OF THE ADJACENT SIDEWALK.
2. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725.
3. ALL HANDICAP RAMPS SHALL HAVE ADA DETECTABLE
4. TRUNCATED WARNING PAVERS PER DETAIL SV263.
5. ROUGH BROOM FINISH (TYP)
6. SUBGRADE PREPARATION PER MAG STD. SECT. 301.
7. 3" ABC COMPACTED TO 95% DENSITY. SEE STD. DETAIL SV200-3.
8. 1" OF BEDDING SAND BETWEEN NEW PAVERS AND CONCRETE.
9. EXPANSION JOINT THROUGH CURB AND GUTTER. EXPANSION JOINT FILLER SHALL BE ½" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER ASTM 0-1751.
10. ONLY "COMMERCIAL" DRIVEWAYS/ALLEYS SHALL HAVE ADA DETECTABLE TRUNCATED WARNING PAVERS PER STD DETAIL SV263.



COMMERCIAL/ INDUSTRIAL	
DRIVEWAY WIDTH	MIN. MAX. CONC. DEPTH
	16' 40' 6"
RESIDENTIAL	
DRIVEWAY WIDTH	MIN. MAX. CONC. DEPTH
	16' 30' 5"



CITY OF SIERRA VISTA
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CITY OF SIERRA VISTA
COMBINED RESIDENTIAL/COMMERCIAL
ALLEYWAY AND DRIVEWAY ENTRANCE

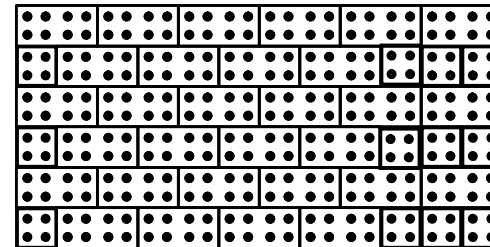
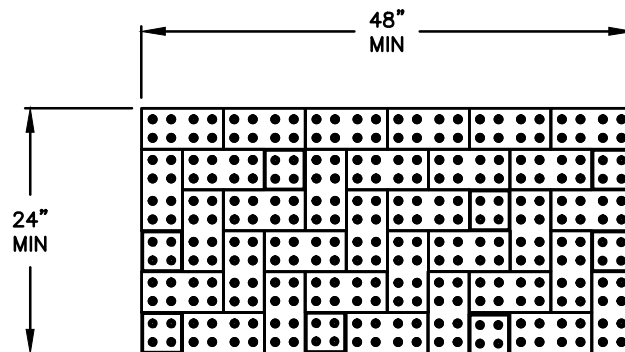
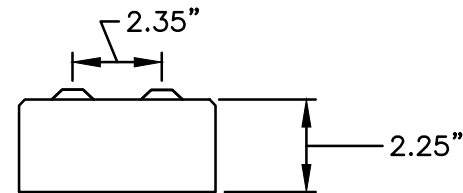
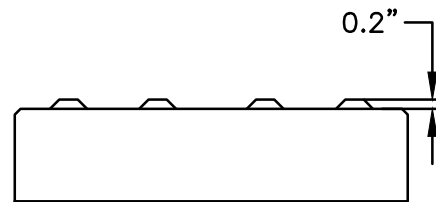
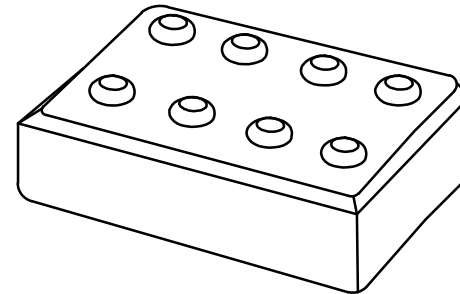
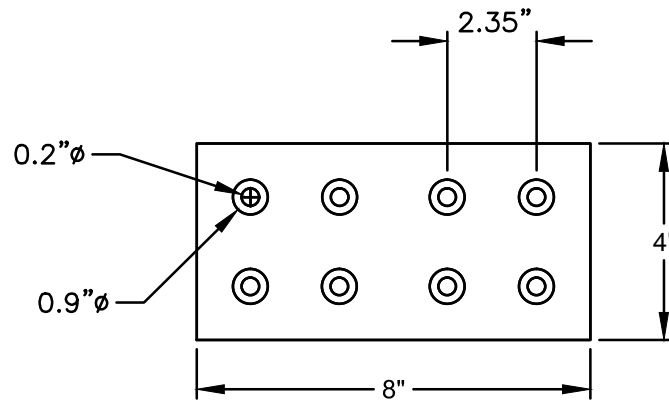
REVISED: 09/2015

SCALE:
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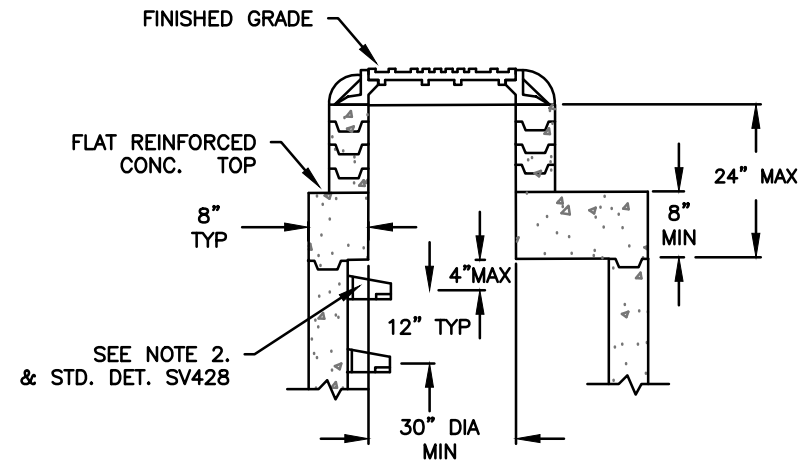
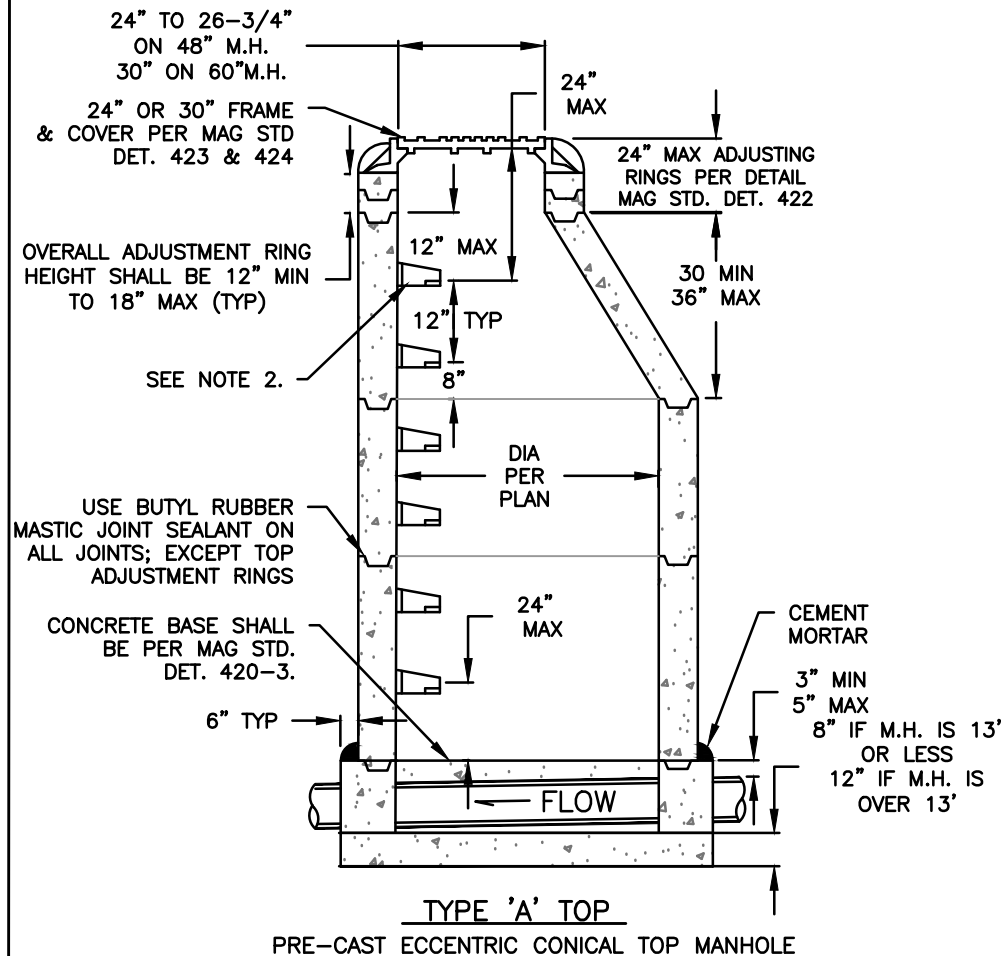
DETAIL NO:
SV262

NOTES:

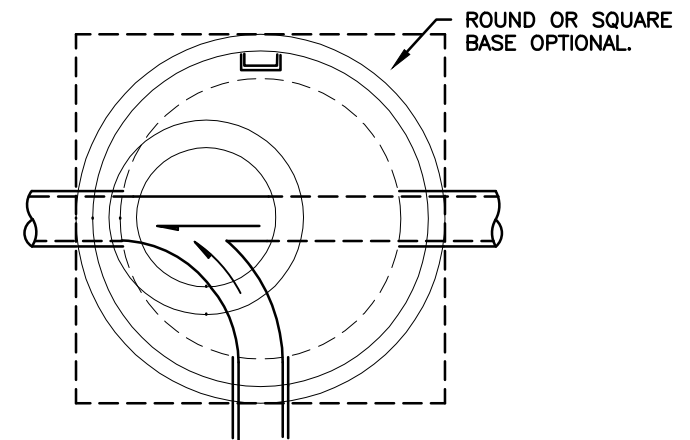
1. DETECTABLE WARNING PAVERS
4" X 8" X 2-1/4" RED IN COLOR



PAVERS TO BE LAID IN HERRINGBONE
OR RUNNING BOND PATTERN



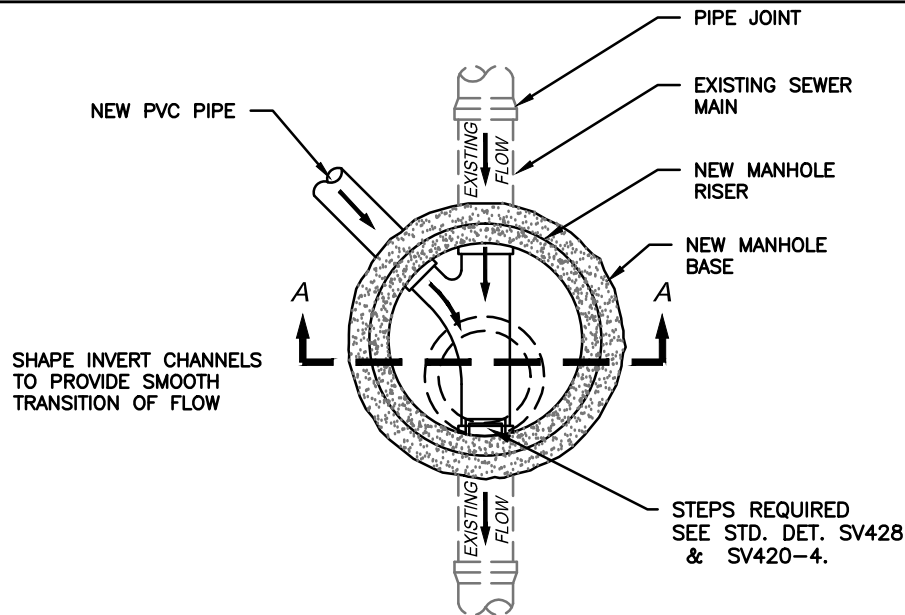
(PRECAST FLAT TOP MANHOLE)



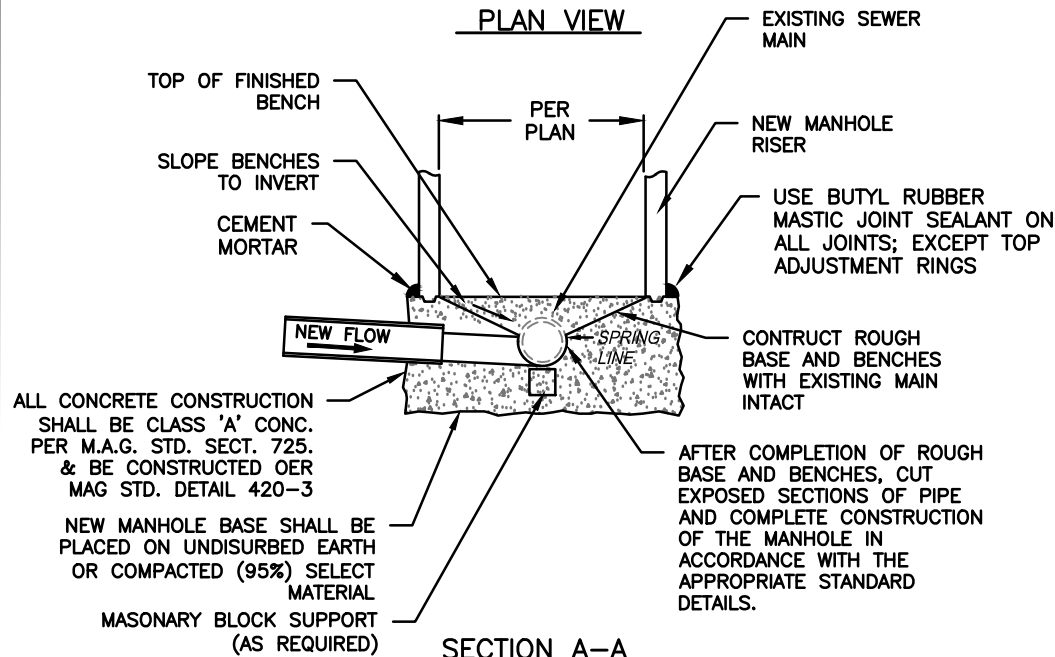
NOTES:

1. PRE-CAST, REINFORCED M.H. SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. C-478 EXCEPT AS MODIFIED HEREIN.
2. M.H. STEPS SHALL BE INSTALLED AT SITE OF M.H. SECTION MANUFACTURE. MINIMUM CLEARANCE EACH SIDE OF M.H. LEG SHALL BE 1". STEPS SHALL BE MOUNTED WITH 2 TO 1 SAND/CEMENT DRY PACK MORTAR. (SEE DETAIL SV428 FOR M.H. STEPS.)
3. ALL CONCRETE CONSTRUCTION SHALL BE CLASS 'A' CONC. PER M.A.G. STD. SECT. 725. FOR CAST IN PLACE MANHOLE BASE TO BE CONSTRUCTED IN ONE PLACEMENT.
4. CAST IN PLACE MANHOLE BASE SHELF AND CHANNEL TO RECEIVE SMOOTH TROWEL FINISH.

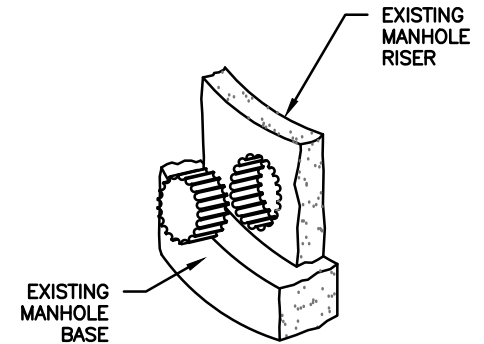
5. MANHOLE COATINGS PER CITY OF SIERRA VISTA, WHEN REQUIRED.
6. SEE SIERRA VISTA DETAIL SV422 FOR FINAL ADJUSTMENT TO GRADE.
7. ANY MANHOLE OVER 20' SHALL REQUIRE ENGINEER (STRUCTURAL) CALCS.
8. THE MANHOLE ACCESS POINT SHALL BE ORIENTED IN SUCH A WAY THAT THE OPENING IS DIRECTLY ABOVE THE LOWEST INVERT, OR AS OTHERWISE DIRECTED BY THE PLANS OR ENGINEER.
9. FOR PRECAST BASE SEE MAG. STD. DETAIL 420-2.
10. FLAT TOPS SHALL ONLY BE USED WITH APPROVAL FROM THE ENGINEER.



PLAN VIEW



SECTION A-A



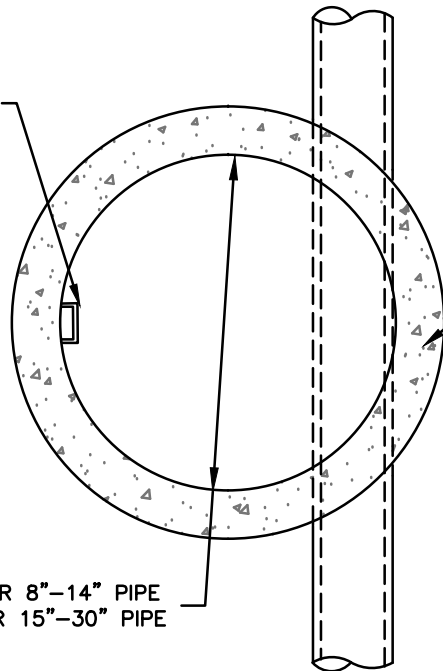
DRILLING DETAIL

NOTES:

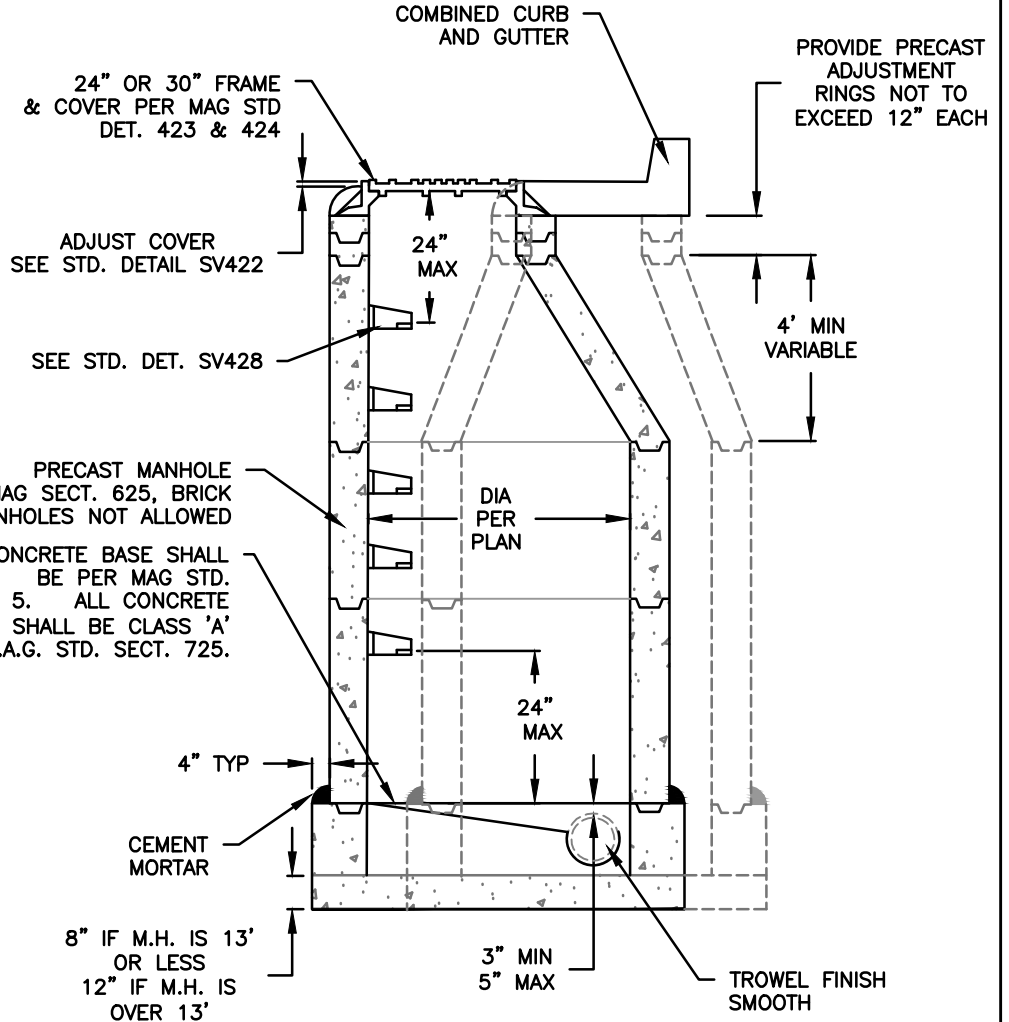
1. CORING MANHOLE RISER TO ADD NEW PIPE SHALL NOT BE DONE WITHOUT APPROVAL FROM THE ENGINEER.
2. CONCRETE CORE MANHOLE RISER OR DRILL $\frac{3}{4}$ " HOLES AT 2" INTERVALS IN CIRCULAR PATTERN. THEN BREAK OUT SEGMENT OF MANHOLE RISER TO ACCOMMODATE NEW PIPE.
3. SEE STD. DETAIL SV420-4 FOR MANHOLE CONE/FLATTOP COVER.

PIPE SIZE AND ELEVATIONS
AS SHOWN ON PLANS

MANHOLE STEPS
PER STD.
DETAILS
SV420-4 &
SV428

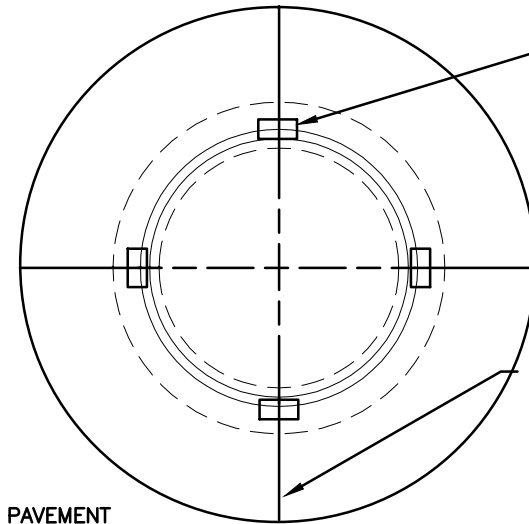


48" I.D. FOR 8"-14" PIPE
60" I.D. FOR 15"-30" PIPE

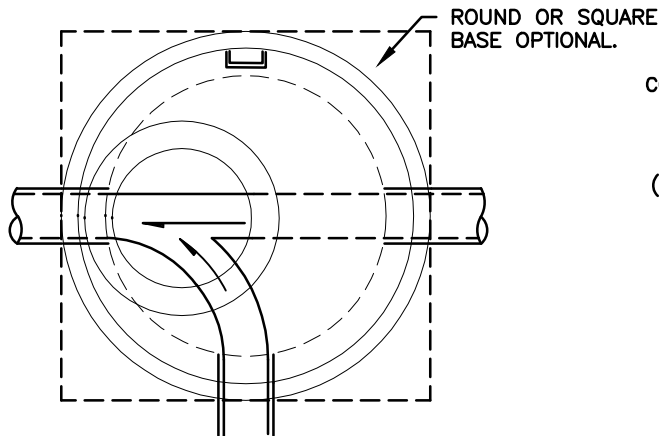
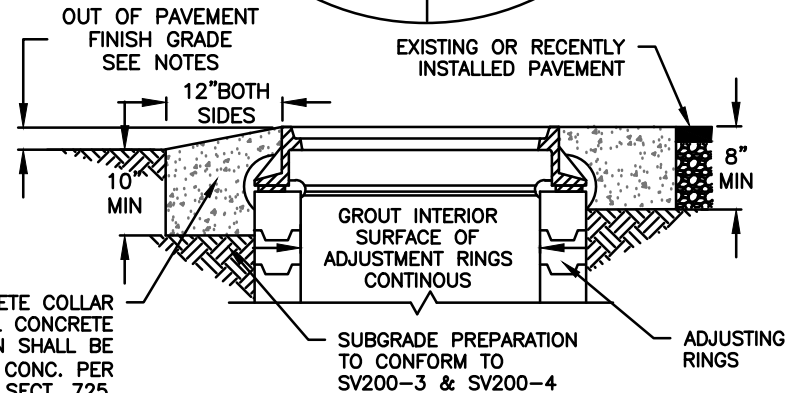


NOTES:

1. EXISTING BRICK MANHOLES AND BASES SHALL BE REPLACED WITH NEW CONCRETE MANHOLES. NO NEW CONNECTION SHALL BE MADE TO AN EXISTING BRICK MANHOLE. EXISTING BRICK MANHOLES SHALL NOT BE ADJUSTED TO A NEW FINISH GRADE. ANY EXISTING BRICK MANHOLES THAT NEED TO BE ADJUSTED TO GRADE SHALL BE COMPLETELY REPLACED.
2. ANY MANHOLES THAT ARE LOCATED IN AREAS THAT ARE TEMPORARILY UNPAVED SHALL BE RAISED TO AT LEAST ONE FOOT ABOVE THE HIGHEST ADJACENT GRADE ANTICIPATED. ALL MANHOLE BARRELS OR ADJUSTMENT RINGS USED TO RAISE THE MANHOLE SHALL BE SEALED WITH MASTIC OR GROUT (AS SPECIFIED) AS IF THE INSTALLATION WERE TO BE PERMANENT. MANHOLES ARE TO BE LOWERED ONLY IN ANTICIPATION OF PAVING.
3. ANY MANHOLES THAT ARE LOCATED IN AREAS THAT WILL NOT BE PAVED SHALL BE RAISED TO AT LEAST ONE FOOT ABOVE THE HIGHEST ADJACENT GRADE. A CONCRETE COLLAR SHALL BE PLACED AROUND THE EXPOSED PORTIONS OF THE MANHOLE BARREL. THICKNESS OF THE CONCRETE COLLAR TO BE AT LEAST ONE FOOT (MEASURED PERPENDICULAR TO THE BARREL).
4. CONTRACTORS SHALL ADJUST ALL MANHOLE RINGS AND COVERS, INCLUDING MANHOLES OUTSIDE OF THE PAVEMENT.
5. GROUT SHALL BE USED BETWEEN FRAME AND ADJUSTING RINGS TO ACHIEVE WATER TIGHTNESS.

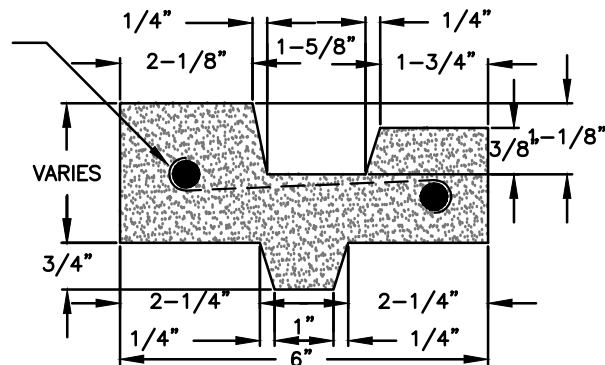


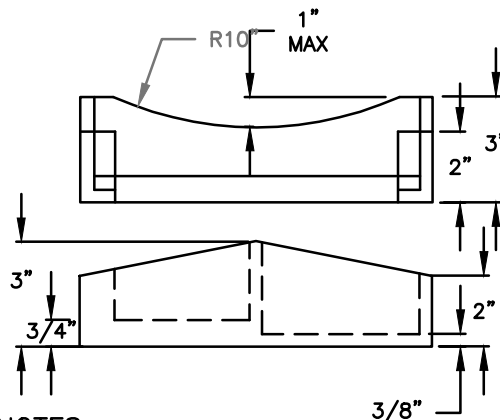
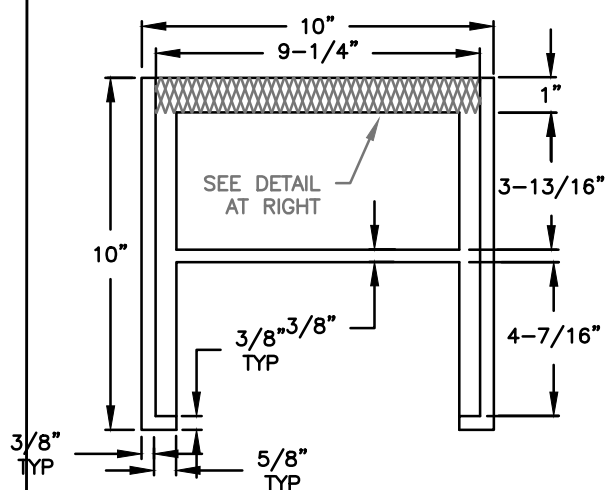
QUANTITIES	REQUIRED THICKNESS
BRICK	GREATER THAN 2"
4"X2" STEEL SPACER	1/2" TO 2"
GROUT	LESS THAN 1/2"



CONCRETE COLLAR
ALL CONCRETE
CONSTRUCTION SHALL BE
CLASS 'A' CONC. PER
M.A.G. STD. SECT. 725.

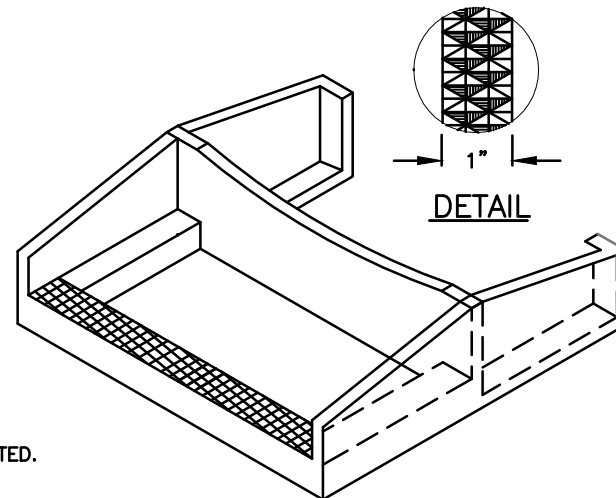
(2) NO. 2 HOOPS FOR 4"
RING TIED WITH NO. 4
A.S. & W. GAUGE WIRE.
6" & 8" RING REQUIRE (4)
NO. 2 HOOPS.



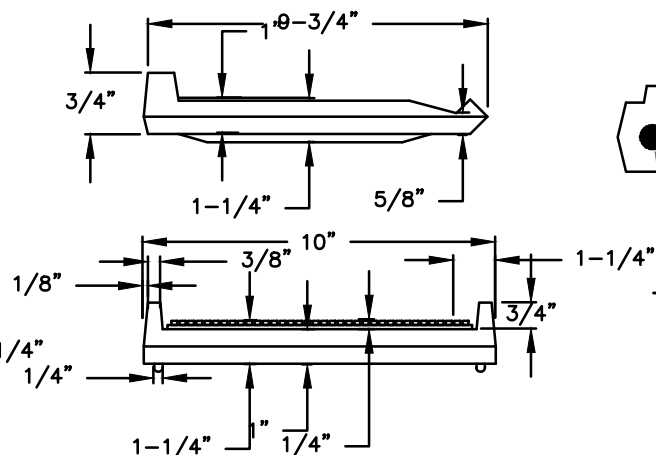
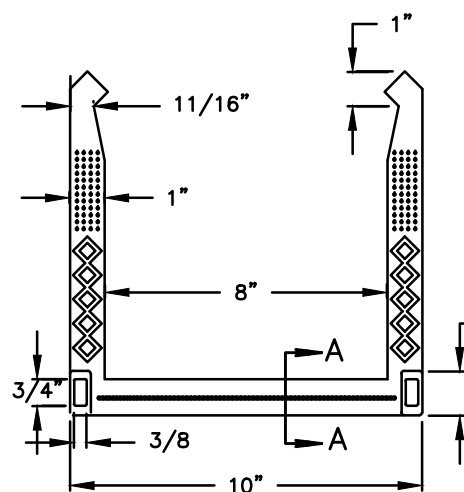


NOTES:

- NOTES:**
1. ALL DIMENSIONS ARE MINIMUM EXCEPT WHERE NOTED.
2. CASTING AS PER SECT. 787.



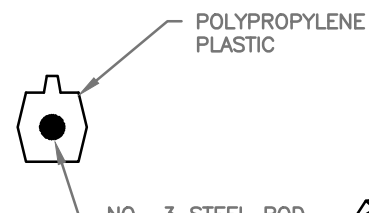
CAST IRON MANHOLE STEP



NOTES:

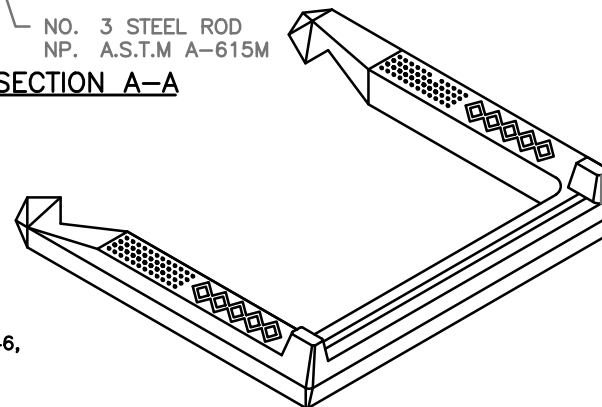
1. STEPS SHALL PLACED INTO WET CONCRETE HAS SET.
2. POLYPROPYLENE MUST MEET REQUIREMENTS OF A.S.T.M. 2146, TYPE TYPE II, GRADE 16906

POLYPROPYLENE MANHOLE STEP



NO. 3 STEEL ROD
NP. A.S.T.M A-615M

SECTION A-A



CITY OF SIERRA VISTA
1011 North Coronado Drive
Sierra Vista, AZ 85635
520-458-5775

CITY OF SIERRA VISTA
MANHOLE STEPS DETAIL

REVISED:
09/2015

SCALE:
NTS

DETAIL NO:
SV428

MINIMUM FREQUENCY OF TESTS FOR TRENCH BACKFILL REQUIRED FOR PUBLIC WORK PROJECTS IN THE CITY OF SIERRA VISTA
(SEE THE CITY OF SIERRA VISTA DEVELOPMENT CODE 151. & STD. DETAIL SV200-3)

OUTSIDE A STREET PRISM (PUBLIC UTILITY EASEMENT):

NATIVE MATERIAL – ON3 TEST PER 12-INCH LIFT PER 400 LINEAL FEET. 95% DENSITY

ABC MATERIAL – ONE TEST PER 24-INCH LIFT PER 400 LINEAL FEET. 95% DENSITY

NON-PAVED ALLEY:

NATIVE MATERIAL – ONE TEST PER 12-INCH LIFT PER 400 LINEAL FEET. 95% DENSITY

ABC MATERIAL – ONE TEST PER 24-INCH LIFT PER 400 LINEAL FEET. 95% DENSITY

EXISTING PAVED STREET PRISM (OR WITHIN 24" OF THE ASPHALT, CURB, OR SIDEWALK):

ABC ONLY – ONE TEST PER 24-INCH LIFT PER 50 LINEAL FEET. 95% BELOW THE TOP 24-INCHES. 100% DENSITY FOR THE TOP 24-INCHES.

EXISTING PAVED ALLEY:

ABC ONLY – ONE TEST PER 24-INCH LIFT PER 50 LINEAL FEET. 100% DENSITY FOR THE TOP 24-INCHES. 95% BELOW THE TOP 24-INCHES.

PROPOSED STREET PRISM:

APPROVED NATIVE (FINES REQUIREMENT) – ONE TEST PER 12-INCH LIFT PER 300 LINEAL FEET. 95% DENSITY

ABC MATERIAL – ONE TEST PER 24-INCH LIFT PER 400 LINEAL FEET. 95% DENSITY

ALL TEST RESULTS SHOULD BE SENT TO THE CITY OF SIERRA VISTA FAX (520) 417-4859

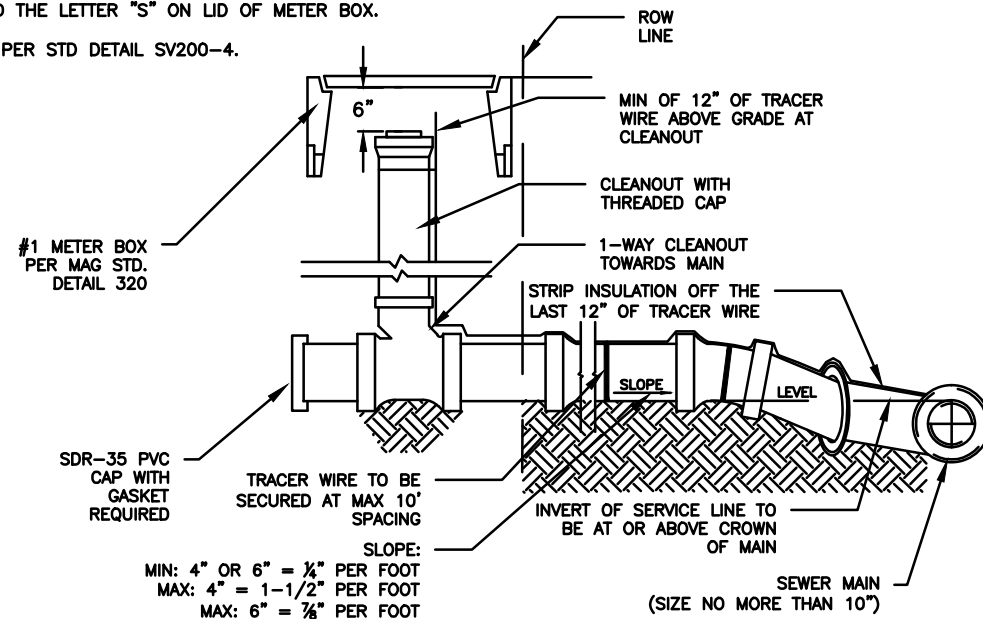
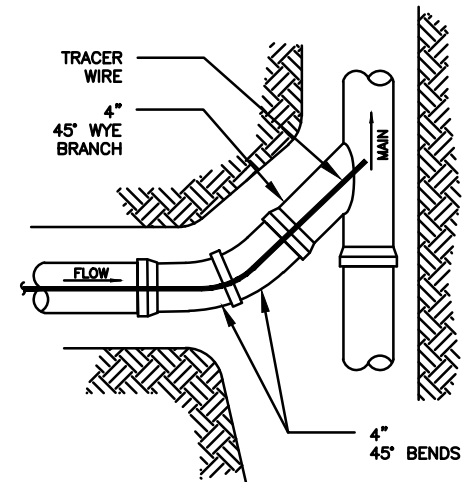
NOTE:

FIELD DENSITY TESTS SHALL BE TAKEN AT EVERY ONE-FOOT LIFT (VERTICALLY) OF NATIVE MATERIAL BEGINNING 18-INCHES ABOVE THE TOP OF THE GRANULAR SHADING MATERIAL OR FOR EVERY TWO-FOOT LIFT (VERTICALLY) OF ABC BACKFILL MATERIAL BEGINNING 12-INCHES ABOVE THE TOP OF THE GRANULAR SHADING MATERIAL. THE DENSITY TESTS SHALL BE STAGGERED IN ORDER TO DISTRIBUTE TESTING THROUGHOUT THE LIFTS OF BACKFILL MATERIAL PLACED IN THE TRENCH. ABC MAY NEED TO BE PLACED IN LESS THAN 24-INCH LIFTS TO OBTAIN THE REQUIRED DENSITY. SEE CITY OF SIERRA VISTA DEVELOPMENT CODE 151.08.009 FOR CITY REQUIREMENTS AND MAG 601.4.6 FOR GRANULAR SHADING MATERIAL REQUIREMENTS.

EXAMPLE: IN A TRENCH, WHICH REQUIRES 36-INCHES OF COVER OVER THE PIPE, WHICH IS BACKFILLED WITH NATIVE MATERIAL, AND ASSUMING 12-INCHES OF GRANULAR SHADE MATERIAL THE FIRST TEST WOULD BE 30-INCHES ABOVE THE TOP OF THE PIPE (18-INCHES ABOVE THE SHADE MATERIAL) AND THE SECOND TEST WOULD BE AT FINISH GRADE. FOR THE SAME TRENCH BACKFILLED WITH ABC AND ASSUMING 12-INCHES OF SHADE MATERIAL YOU WOULD ONLY HAVE ONE-TEST AT FINISH GRADE. IF THE UTILITY OWNER ALLOWS LESS THAN 12-INCHES OF GRANULAR SHADE MATERIAL THE FREQUENCY OF TESTS MAY INCREASE.

NOTES:

1. SADDLE TYPE CONNECTION IS ONLY ALLOWED ON NEW SEWER TAPS INTO EXISTING SEWER LINES. ALL NEW CONSTRUCTION SHALL BE Y-CONNECTIONS PER MAG DETAIL 440.
2. SIZE OF TAP SHALL BE DESIGNATED ON PLANS.
3. CONSTRUCTION TAP AT MINIMUM SLOPE IF COVER WILL BE LESS THAN 5' AT PROPERTY LINE.
4. IF DEPTH REQUIRES, MINIMUM SLOPE CAN BE REDUCED TO $\frac{1}{8}$ " PER FOOT PROVIDED STUB IS STAKED TO GRADE.
5. ALL FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321. THE CONTRACTOR MAY VARY FROM THE DRAWING TO USE THE APPROPRIATE WYES.
6. TEE WYES AND BENDS TO ENSURE NO MISALIGNMENT OF THE PIPE AND FITTINGS. BLOCK OR BRACE FITTING JOINTS TO ENSURE ZERO DEGREES ANGULAR JOINT DEFLECTION.
7. END OF TAP TO BE SEALED AND MARKED AS NOTED.
8. A TRACER WIRE SHALL BE INSTALLED IN ORDER FOR THE CITY TO LOCATE ALL HCS LATERAL SEWER LINES. THE TRACER WIRE SHALL BE CONTINUOUS (NO SPLICES) SOLID 14 AWG COPPER WIRE WITH GREEN TYPE UF (UNDERGROUND FEEDER) INSULATION. THE WIRE SHALL BE SECURELY TAPED AT A MAXIMUM OF 10-FOOT INTERVALS AND EXTEND FROM THE SEWER MAIN TO A CLEANOUT AT ALL HCS LATERAL LINES. 12-INCHES OF TRACER WIRE SHALL BE ACCESSIBLE ABOVE GRADE AT THE CLEANOUT. THE CLEANOUT SHALL BE LOCATED ON THE PRIVATE SIDE OF THE PUBLIC RIGHT OF WAY.
9. STAMP OR WELD THE LETTER "S" ON LID OF METER BOX.
10. ABC SHALL BE PER STD DETAIL SV200-4.



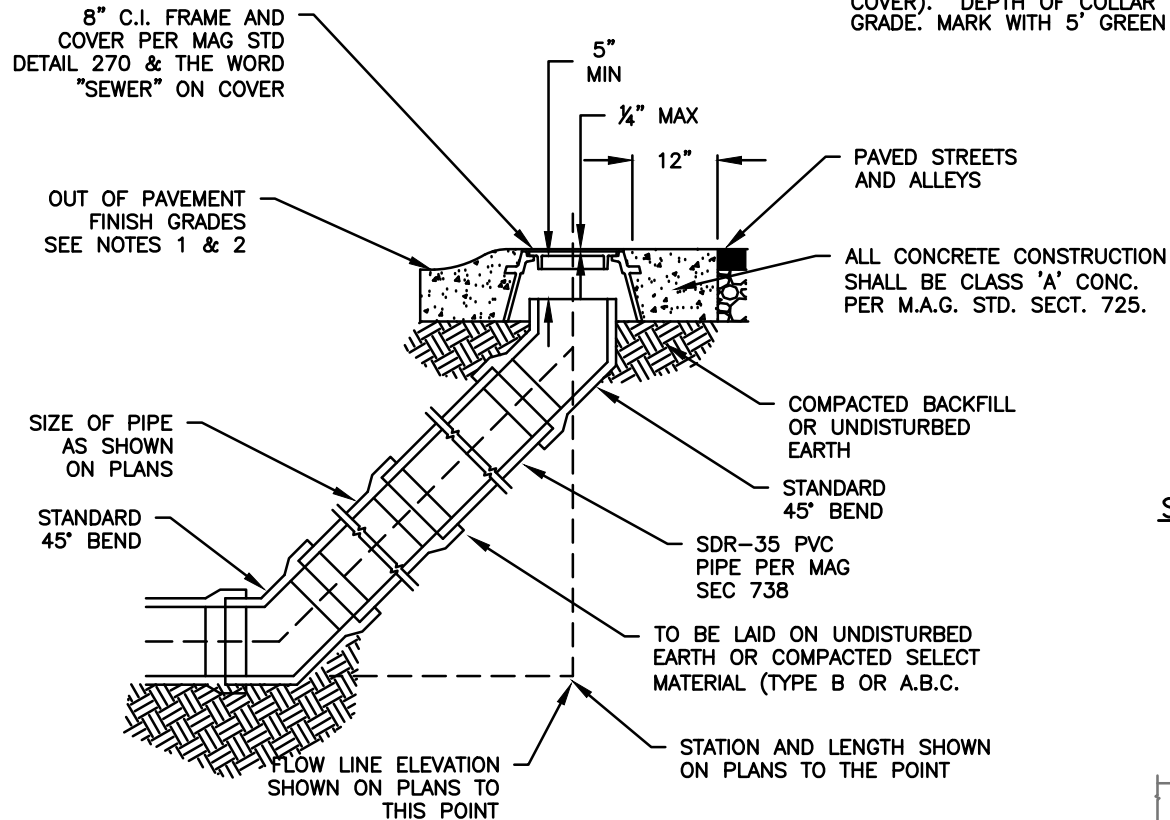
CITY OF SIERRA VISTA
1011 North Coronado Drive
Sierra Vista, AZ 85635
520-458-5775

CITY OF SIERRA VISTA
NEW SEWER BUILDING
CONNECTIONS

REVISED: 09/2015	SCALE: NTS
DETAIL NO: SV440	

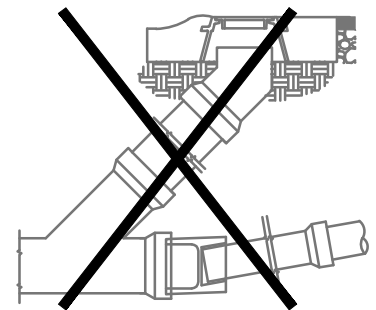
NOTES:

1. ANY CLEANOUTS THAT ARE LOCATED IN AREAS THAT ARE TEMPORARILY UNPAVED SHALL BE RAISED TO AT LEAST ONE FOOT ABOVE THE HIGHEST ADJACENT GRADE ANTICIPATED. PROVIDE A STRAIGHT PIECE OF PIPE TO RAISE THE INLET ONE FOOT ABOVE ADJACENT GRADE. COVER WITH PVC CAP AND MARK WITH TRAFFIC CONES.
2. ANY MANHOLES THAT ARE LOCATED IN AREAS THAT WILL NOT BE PAVED SHALL BE RAISED TO AT LEAST ONE FOOT ABOVE THE HIGHEST ADJACENT GRADE. A CONCRETE COLLAR SHALL BE PLACED AROUND THE EXPOSED PORTIONS OF THE CLEANOUT. THICKNESS OF THE CONCRETE COLLAR TO BE AT LEAST ONE FOOT (MEASURED PERPENDICULAR TO THE COVER). DEPTH OF COLLAR TO BE AT LEAST 1 FOOT BELOW GRADE. MARK WITH 5' GREEN T-POST.



CLEANOUT INSTALLATION

SEWER TAP AT CLEANOUT



NOT ALLOWED